UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

School of Health Care Sciences

Department of Nursing Science

INITIATIVES FOR ENHANCING UTILISATION OF MATERNAL HEALTHCARE SERVICES: A PARTICIPATORY ACTION RESEARCH

Research study for PhD in Nursing Sciences Degree

Student name: Jesca Mutowo

Student number: U14371643

September 2018

Supervisors:

Dr M Yazbek

Dr A van der Wath

Prof CM Maree

DEDICATION

This thesis is dedicated to the loving memory of my late husband Dr. Maurice Kenneth Kuziwa Mutowo. I am convinced you are proud of me because education was always your priority.

To the CIG members, this is the product of your hard work.

ACKNOWLEDGEMENTS

I am sincerely and heartily grateful to my supervisors, Dr. Mariatha Yazbek, Dr. van der Wath and Prof. Carin Maree. Their encouragement, support and guidance were the strength that I needed during this journey. I value their meticulous attention to detail. I am also grateful to the University of Pretoria for the financial support.

I would like to pass my gratitude to Mhondoro-Ngezi CIG group members, St Michaels Mission Hospital community and Ministry of Health and Child Care. I am also grateful to Ms Elizabeth Nherera, the statistician and Mr Elliot Magombe for editing the thesis.

My deepest gratitude goes to my mother for her love and support. She taught me to persevere. I gratefully acknowledge my late husband, Maurice, for his encouragement and support. I wouldn't have reached this far if he wasn't a supportive and empowering husband.

A special appreciation goes to my beloved sons, Mwazvita and Kuziwa, for their patience during my studies when I deprived them of the attention they desperately needed. I thank them very much for their strength and motivation that gave me hope and confidence.

All honour and glory be to God Almighty!

ABSTRACT

Healthcare utilisation has a strong impact on maternal health. Any delay in accessing obstetric care may result in the death of a mother and the unborn child. The fundamental aim of this study was to develop and implement initiatives for enhancing utilisation of maternal healthcare services through a collaborative and participatory research process. The subjective voices of the maternal healthcare users, providers and community members were integrated in the study through iterative processes of action and reflection.

From a critical theory perspective, the research challenged the operational, individual, socio-cultural and religious norms and values that inhibit utilisation of maternal healthcare services. Equipped with this new insight, the cooperative inquiry group (CIG) members addressed issues that were pertinent. Bob Mash's cooperative inquiry, a participatory action research (PAR) design guided this three-cycle study. Cycle 1, the situational analysis explored maternal healthcare services utilisation in Mhondoro-Ngezi district. Quantitative and qualitative data were collected sequentially. Descrptive and inferential statistics and Tesch's thematic analysis were used to analyse quantitative and qualitative data respectively.

Findings revealed that women in Mhondoro-Ngezi district do not book their pregnancy before three months of gestation and some women only come to give birth to obtain birth records. Few women utilize postnatal care services at day 7 and six weeks, resulting in missed opportunities in full uptake of scheduled interventions. Furthermore, the study revealed disrespect and maltreatment of maternal healthcare users and failure to appreciate and integrate traditional and religious knowledge and practices. Data generated was used to develop a birth preparedness information booklet, a check-list to evaluate health personnel attitudes and create awareness for enhancing utilisation of maternal healthcare services in Cycle 2. Evaluation of the impact of the developed initiatives was undertaken in Cycle 3 using the same methods used in Cycle 1 to generate data. The major finding was that community participatory approach for disseminating maternal health information may be the most effective community-based health promotion programme.

The study recommends adoption of the developed check-list and birth preparedness information booklet nationally and beyond, to strengthen health information dissemination.

Key words: participatory action research, cooperative inquiry group, maternal healthcare, initiatives.

ACRONYM/ ABBREVIATIONS

Abbreviation / acronym	Meaning
AMENI	Apostolic Maternal and Newborn Interventions
ANC	Antenatal care
ART	Antiretroviral Treatment
ASHAs	Accredited Social Health Activists
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
CARMMA	Campaign on Accelerated Reduction of Maternal Mortality in Africa
CCORE	Collaborating Centre for Operational Research and Evaluation
CDC	Centre for Disease Control
CIG	Critical Inquiry Group
DFID	Department for International Development
EDLIZ	Essential Medicines List and Standard Treatment
FIGO	International Federation of Gynaecology and Obstetrics
HIV	Human Immune Virus
HTF	Health Transition Fund
ICD	International Statistical Classification of Diseases
ICF	International Coach Federation
ICM	International Confederation of Midwives
ITECH	International Education and Training Centre for Health
MCHIP	Maternal and Child Health Integrated Programme
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MoHCC	Ministry of Health and Child Care
MRCZ	Medical Research Council of Zimbabwe
OPHID	Organization of Public Health Interventions and Development
PAHCO	Pan American Health Organization
PHNI	Population, Health and Nutrition Information
PAR	Participatory Action Research
PEPFAR	President’s Emergency Plan for AIDS Relief
PMTCT	Prevention of Mother to Child Treatment
REACH	Regional East Africa Community Health Policy Initiative
SDG	Sustainable Development Goal
UKAID	United Kingdom AID
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Family Planning Agency
UNICEF	United Nations Children’s Education Fund
UNHRO	Uganda National Health Research Organization
USAID	United States Agency for International Development

WHO	World Health Organization
WRAZ	White Ribbons Alliance Zimbabwe
ZAOGA	Zimbabwe Assemblies of God Africa
ZICOM	Zimbabwe Confederation of Midwives
ZDHS	Zimbabwe Demographic Health Survey
ZIMSTAT	Zimbabwe National Statistics Agency

TABLE OF CONTENTS **Page**

Dedication ii

Acknowledgements iii

Abstract iv

List of Tables xvii

List of Figures xix

CHAPTER 1: OVERVIEW OF THE STUDY 1

1.1 Introduction 1

1.2 Background 1

1.2.1 Utilisation of maternal healthcare services and associated factors 1

1.2.1.1 Antenatal care services utilization and associated factors 2

1.2.1.2 Intrapartum care services utilisation and associated factors 6

1.2.1.3 Postnatal care services utilisation and associated factors 8

1.2.2 Initiatives to enhance utilisation of maternal healthcare services 10

1.3 Rationale 11

1.4 Problem Statement 12

1.5 Context 13

1.6 Significance of the Study 15

1.7 Research questions 15

1.8 Aim and objectives 16

1.9 Concepts clarification 16

1.10 Delineation 18

1.11 Research design and methodology 18

1.12 Rigour 24

1.12.1Trustworthiness 24

1.12.2 Reliability and validity 24

1.13 Ethical Considerations 24

1.14 Organisation of the Chapters 26

1.15 Conclusions 26

CHAPTER 2: PHILOSOPHICAL FOUNDATION AND METHODOLOGY 27

2.1 Introduction 27

2.2 Research paradigm: critical theory 27

2.2.1 Brief historical development of critical theory 28

2.2.2 Epistemological assumptions of critical theory 29

2.2.3 Ontological assumptions of critical theory 34

2.2.4 Methodological assumptions of critical theory 35

2.2.5 Rationale for using critical theory 36

2.2.6 Critique of critical theory 36

2.3 Research design 37

2.3.1 Participatory action research approaches 37

2.3.2 History of PAR 38

2.3.3 Process of PAR 39

2.4 Research method 40

2.4.1 Cooperative inquiry method 40

2.4.2 The cooperative inquiry group (CIG) 41

2.4.3 Explanation of the cycles 42

2.4.3.1 Cycle 1: Situation analysis to obtain baseline data on the utilisation of maternal healthcare services. 42

2.4.3.2 Cycle 2: Develop and implement initiatives to enhance utilisation of maternal healthcare services. 50

2.4.3.3 Cycle 3: Evaluate the impact of the implemented initiatives 53

2.5 Rigour 57

2.5.1 Trustworthiness 57

2.5.2 Reliability and validity of the data capturing sheet 59

2.6 Ethical considerations 60

2.7 Conclusion 60

CHAPTER 3: FINDINGS OF CYCLE 1 AND LITERATURE CONTROL 62
3.1 Introduction 62
3.2 Description of health facilities 63
3.3 Description of antenatal care (ANC) utilisation 64
3.3.1 Initial ANC contact visit 64
3.3.2 Maternal services offered during pregnancy 69
3.3.2.1 Rapid plasma reagent testing during ANC visit 69
3.3.2.2 Human Immune Virus (HIV) testing during ANC visit 71
3.3.2.3 Intermittent preventive treatment for malaria during ANC 73
3.3.3. Antenatal care contact repeat visits 75
3.4 Description of intrapartum care utilisation 77
3.4.1 Human immune virus (HIV) status of women at delivery 79
3.4.2 Prevention of mother to child transmission (PMTCT) at delivery 80
3.5 Description of postnatal care utilisation 82
3.5.1 Postnatal visits 82
3.5.2 Vitamin A supplementation during the postnatal period 84
3.6 Maternal transfer from clinics to the district and central hospitals 85
3.7 Maternal mortality rates 86
3.8 Maternity drug availability 88
3.9 Factors related to utilisation of maternal healthcare services 89
3.9.1 Characteristics of the focus group discussion participants 90
3.10 Barriers to use of available resources and maternal healthcare services 92
3.10.1 Maternal healthcare system related barriers 94
3.10.1.1 Health personnel attitude 94
3.10.1.2 Long waiting times 97
3.10.1.3 Incidental costs and perceived user fees 98
3.10.1.4 Distance to health facility and transport problems 99
3.10.1.5 Presence of male midwives 102

3.10.1.6 Shortage of resources at healthcare facilities 104

3.10.1.7 Transfer process between hospitals 106

3.10.1.8 Disregard for indigenous health practices 107

3.10.2 Maternal healthcare user related barriers 108

3.10.2.1 Lack of knowledge 108

3.10.2.2 Fear of HIV testing 109

3.10.2.3 Reluctance to book for ANC and to attend more ANC contact visits 110

3.10.2.4 Fear of staying at the hospital longer 112

3.10.2.5 Maternal healthcare user attitude 112

3.10.2.6 Age and experience 113

3.10.2.7 Physical factors 114

3.10.2.8 Other responsibilities 115

3.10.2.9 More trust in help provided in the community 115

3.10.2.10. Seek maternal healthcare services when there is a problem 116

3.10.3 Support system related barriers 116

3.10.3.1 Lack of spousal support and involvement 117

3.10.3.2 Partner refuses HIV testing 119

3.10.3.3 Partner not at home 119

3.10.3.4 Presence of traditional birth attendants / elderly women/ relatives 120

3.10.3.5 Lack of community support 122

3.10.4 Culture related barriers 122

3.10.4.1 Cultural beliefs and norms 123

3.10.4.2 Use of herbs 125

3.10.5 Religious related barriers 126

3.10.5.1 Fear of mystic forces 126

3.10.5.2 Church doctrine 127

3.10.5.3 Religious healing practices 129

3.11 Enablers to Use of available resources and maternal healthcare services 129

3.11.1 Maternal healthcare system related enablers 130

3.11.1.1 Healthcare services offered 131

3.11.1.2 Provision of incentives 132

3.11.1.3 Issuing of birth records and baby cards 132

3.11.1.4 Availability of skilled birth attendants 133

3.11.1.5 Provision of transport 134

3.11.2 Maternal healthcare user related enablers 134

3.11.2.1 Dissemination of knowledge regarding complications and importance of healthcare 135

3.11.3 Community related enablers 135

3.11.3.1 Involvement of community members 136

3.11.3.2 Provision of transport 136

3.11.3.3 National policy 136

3.11.4 Religious related enablers 137

3.11.4.1 Religious association involvement 137

3.12 Beliefs, practices and taboos 138

3.12.1 Cultural beliefs and practices 139

3.12.1.1 Prevention of anaemia in pregnancy 139

3.12.1.2 Use of herbs to prepare for birth 140

3.12.1.3 Other indigenous practices to speed up labour 141

3.12.1.4 Indigenous practices to prevent complications for mother and baby 141

3.12.2 Religious beliefs and practices 142

3.12.2.1 Using of holy objects and fluids 142

3.12.2.2 Practices to stretch the perineum 143

3.13. Conclusion 144

CHAPTER 4: CYCLE 2 DEVELOPMENT AND IMPLEMENTATION OF THE INITIATIVES 145

4.1 Introduction 145

4.2 Recruitment of CIG members 145

4.3 Demographic characteristics of CIG members 146

4.4 CIG Processes - Cycle 2 147
4.4.1 Planning and implementation 148
4.4.2 Acting 153
4.4.2.1 Posters to create awareness on male partner involvement 154
4.4.2.2 Poster to create awareness on non-payment of maternity care 156
4.4.2.3 Birth preparedness information booklet 158
4.4.2.4 Monitor maternal health personnel attitudes 168
4.4.2.5 Train maternal healthcare providers on respectful maternity care and universal rights of the childbearing woman 172
4.4.2.6 Create awareness on disclosing use of herbs during childbirth 177
4.4.2.7 Engage hospital authorities on initiating and scaling-up home visits 177
4.4.2.8 Engage religious leaders on non-utilisation of maternal healthcare services by church members 178
4.5 Observe and reflect (evaluating) 179
4.5.1 Document the group processes 179
4.5.2 Changes in practice 180
4.5.3 Challenges 181
4.6 Comparison with findings from other research 181
4.7 Conclusion 182
CHAPTER 5: FINDINGS OF CYCLE 3 AND LITERATURE CONTROL 184
5.1 Introduction 184
5.2 Findings: Section A: Comparison of maternal morbidity and mortality and maternal healthcare services utilisation statistics 186
5.2.1 Comparison of antenatal care utilisation statistics 186
5.2.1.1 Initial antenatal care attendance 186
5.2.2 Comparison on maternal services utilised during pregnancy 189
5.2.2.1 Rapid plasma reagent testing during ANC visit 189
5.2.2.2 Human Immune Virus testing during ANC visit 191

5.2.2.3 Intermittent preventive treatment for malaria during pregnancy 193

5.2.3 Antenatal care contact repeat visits attendance 197

5.3 Comparison of maternal healthcare utilisation during intrapartum period 200

5.3.1 Live, still and early neonatal deaths 200

5.3.2 Human Immune Virus status of women at delivery 203

5.3.3 Prevention of Mother to Child Transmission (PMTCT) at delivery 204

5.4 Comparison of postnatal care utilisation 206

5.4.1 Postnatal care attendance 206

5.4.2 Vitamin A supplementation during postnatal period 207

5.5 Comparison of maternal transfer from clinics to the district and central hospital 208

5.6 Comparison of maternal mortality rates 209

5.7 Comparison of maternity drug availability 209

5.8 Comparison of available resources 210

5.9 Findings: Section B: Comparison of utilisation of maternal healthcare services according to stakeholders 211

5.9.1 Characteristics of the focus group discussion participants 212

5.10 Barriers to utilisation of available resources and maternal healthcare services 215

5.10.1 Maternal healthcare system related barriers 217

5.10.1.1 Health personnel attitude and conduct 218

5.10.1.2 Health personnel attitude towards indigenous practices 224

5.10.1.3 Distance to the health facility and transport problems 224

5.10.1.4 Incidental costs and perceived user fees 227

5.10.1.5 Discourage husband/or partner involvement 228

5.10.1.6 Presence of male midwife 228

5.10.1.7 Inadequate resources 229

5.10.2 Maternal healthcare user related barriers 233

5.10.2.1 Lack of knowledge 233

5.10.2.2 Maternal healthcare user attitude 235

5.10.2.3 Seek maternal healthcare services when there is a problem 237
5.10.2.4 Poverty 238
5.10.2.5 Physical factors 239
5.10.2.6 Other responsibilities 241
5.10.2.7 Fear of reporting abusive treatment 241
5.10.2.8 Fear of HIV testing 242
5.10.3 Support system related barriers 242
5.10.3.1 Lack of partner support and involvement 243
5.10.3.2 Partner afraid of HIV testing 246
5.10.3.3 Perceived fear of women's anger 247
5.10.3.4 Lack of community support 248
5.10.4 Culture related barriers 248
5.10.4.1 Use of herbs 249
5.10.4.2 Cultural beliefs and norms 250
5.10.4.3 Fear of witch craft 250
5.10.4.4 Sanctioning by cultural norms 251
5.10.5 Religious related barriers 251
5.10.5.1 Religious healing practices 252
5.10.5.2. Church doctrine 253
5.11 Enablers to utilisation of available resources and maternal healthcare services 254
5.11.1 Healthcare system related enablers 254
5.11.1.1 Healthcare services offered 255
5.11.1.2 Pain control and prevention of complications 255
5.11.1.3 Provision of health information 256
5.11.2 Community related enablers 256
5.11.2.1 Decline in traditional birth attendants 256
5.12 Beliefs, practices and taboos 257
5.12.1 Cultural beliefs, practices and taboos 257

5.12.1.1 Use of herbs to prepare for birth 258

5.12.1.2 Other indigenous practices to speed up labour 260

5.12.1.3 Indigenous practices to prevent complications to mother and baby 260

5.12.1.4 Cultural taboos and underlying beliefs 261

5.12.2 Religious beliefs, practices and taboos 262

5.12.2.1 Use of holy objects and water 262

5.13: Findings: Section C: CIG members' reflections 263

5.13.1 Changes brought about by developed initiatives 264

5.13.1.1 Maternal healthcare system related changes 265

5.13.1.2 Maternal healthcare user related changes 269

5.13.1.3 Support system related changes 272

5.13.1.4 Community related changes 274

5.14 Conclusion 278

CHAPTER 6: CONCLUSION, LIMITATIONS, STRENGTHS AND RECOMMENDATIONS 279

6.1 Introduction 279

6.2 Research Methodology 279

6.3 Conclusions 280

6.4 Limitations and strengths of the study 286

6.4.1 Limitations 286

6.4.2 Strengths of the study 287

6.5 Recommendations 288

6.5.1 Nursing research 288

6.5.2 Nursing education 288

6.5.3 Midwifery practice 289

6.5.4 Policy level 289

6.5.5 Community level 290

6.6 Contribution to existing midwifery knowledge 290

6.7 Dissemination of Results 291

6.8 Conclusion 292

REFERENCES **294**

ANNEXURES **331**

LIST OF TABLES

Table 1.1: Summarised Participatory Action Research Cycles 22
Table 1.2: Organisation of the thesis chapters 26
Table 3.1: Reasons for patients transfer to Harare Central Hospital in Mhondoro-Ngezi district Jan-Dec 2015 86
Table 3.2: Causes of maternal deaths in Mhondoro-Ngezi District Jan-Dec 2015 87
Table 3.3: Maternal healthcare providers' characteristics 91
Table 3.4: Postnatal women's demographic characteristics 92
Table 3.5: Community members' demographic characteristics 92
Table 3.6: Barriers to utilisation of available resources and maternal healthcare 93
Table 3.7: Maternal healthcare system related barriers 94
Table 3.8: Maternal healthcare user related barriers 108
Table 3.9: Support system related barriers 117
Table 3.10: Culture related barriers 123
Table 3.11: Religious related barriers 126
Table 3.12: Enablers to use of available resources and maternal healthcare services in Mhondoro-Ngezi district 130
Table 3.13: Maternal healthcare system related enablers 130
Table 3.14: Maternal healthcare user related enablers 135
Table 3.15: Community related enablers 135
Table 3.16: Religious related enablers 137
Table 3.17: Beliefs, practices and taboos 138
Table 3.18: Cultural beliefs and practices 139
Table 3.19: Religious beliefs and practices 142
Table 4.1: Demographic characteristics of the CIG members 147
Table 4.2: Summary of the CIG workshops and meetings 153
Table 5.1: Available resources for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 211
Table 5.2: Maternal healthcare providers' characteristics 213
Table 5.3: Postnatal women's demographic characteristics 214
Table 5.4: Community members' demographic characteristics 215
Table 5.5: Barriers to utilisation of available resources and maternal healthcare services 215
Table 5.6: Maternal healthcare system related barriers 217
Table 5.7: Maternal healthcare user related barriers 233
Table 5.8: Support system related barriers 243

Table 5.9: Culture related barriers 249
Table 5.10: Religious related barriers 251
Table 5.11: Enablers to utilisation of available resources and maternal healthcare services in Mhondoro-Ngezi district 254
Table 5.12: Healthcare system related enablers 254
Table 5.13: Community related enablers 256
Table 5.14: Beliefs, practices and taboos 257
Table 5.15: Cultural beliefs, practices and taboos 258
Table 5.16: Religious beliefs, practices and taboos 262
Table 5.17: Changes brought about by initiatives developed by the CIG members in Mhondoro-Ngezi district 264
Table 5.18: Maternal healthcare system related changes 265
Table 5.19: Maternal healthcare user related changes 270
Table 5.20: Support system related changes 273
Table 5.21: Community related changes 274

LIST OF FIGURES

Figure 1.1: The spiral of action research cycles 21
Figure 3.1: First antenatal visit at less than 16 weeks for Mhondoro-Ngezi district Jan–Dec 2015 65
Figure 3.2: First antenatal visit within 16 to 27 weeks for Mhondoro-Ngezi District Jan-Dec 2015 66
Figure 3.3: First antenatal visit after 28 weeks for Mhondoro-Ngezi District Jan-Dec 2015 67
Figure 3.4: Rapid Plasma Reagent Tests done for Mhondoro-Ngezi District Jan-Dec 2015 70
Figure 3.5: Rapid Plasma Reagent positive results for Mhondoro-Ngezi District Jan-Dec 2015 71
Figure 3.6: Human Immune Virus tests for Mhondoro-Ngezi District Jan-Dec 2015 72
Figure 3.7: Human Immune Virus positive tests for Mhondoro-Ngezi District Jan-Dec 2015 73
Figure 3.8: Intermittent Preventive Treatment for malaria for Mhondoro-Ngezi District Jan-Dec 2015 74
Figure 3.9: Fourth and more ANC contact repeats visit for Mhondoro-Ngezi District Jan-Dec 2015 77
Figure 3.10: Live births recorded for Mhondoro-Ngezi District Jan-Dec 2015 79
Figure 3.11: HIV status at delivery for Mhondoro-Ngezi District Jan-Dec 2015 80
Figure 3.12: Prevention of Mother to Child Transmission antiretroviral therapy for Mhondoro-Ngezi District Jan-Dec 2015 82
Figure 3.13: Postnatal care visits for Mhondoro-Ngezi District Jan-Dec 2015 84
Figure 3.14: Vitamin A supplementation for Mhondoro-Ngezi District Jan-Dec 2015 85
Figure 3.15: Maternal drug availability for Mhondoro-Ngezi District Jan-Dec 2015 89
Figure 4.1: Poster 1 on male involvement-Shona version 155
Figure 4.2: Poster 1 English translation 156
Figure 4.3: Poster 2 on Free Maternity Healthcare (Shona) 157
Figure 4.4: Poster 2 English translation 158
Figure 4.5: Birth preparedness information booklet (Shona version) 164
Figure 4.6: Birth preparedness information booklet (English translation) 167
Dissemination of the information booklet 167
Figure 4.7: Check-list to monitor health personnel attitudes-Shona version 170
Figure 5.1: First antenatal visit within 16 weeks for Mhondoro-Ngezi district for June-July 2015 and June-July 2017 187

Figure 5.2: First antenatal visit within 16-27 weeks for Mhondoro-Ngezi district for June-July 2015 and June-July 2017 ... 187
Figure 5.3: First antenatal visit within after 28 weeks for Mhondoro-Ngezi district for June-July 2015 and June-July 2017 ... 188
Figure 5.4: Rapid Plasma Reagent Tests done for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 189
Figure 5.5: Rapid Plasma Reagent positive results done for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 190
Figure 5.6: Human Immune Virus tests done for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 191
Figure 5.7: Human Immune Virus positive tests done for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 193
Figure 5.8: First Intermittent Preventive Treatment for malaria for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 194
Figure 5.9: Second Intermittent Preventive Treatment for malaria for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 195
Figure 5.10: Third Intermittent Preventive Treatment for malaria for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 196
Figure 5.11: Second ANC visit for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 198
Figure 5.12: Third ANC visit for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 199
Figure 5.13: Fourth or more ANC visits for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 200
Figure 5.14: Live births recorded for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 201
Figure 5.15: Still births recorded for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 202
Figure 5.16: Early neonatal deaths for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 203
Figure 5.17: HIV status at delivery for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 204
Figure 5.18: Prevention of Mother to Child Transmission (PMTC) at delivery for mothers for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 205
Figure 5.19: Prevention of Mother to Child Transmission (PMTC) at delivery for babies for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 206
Figure 5.20: Postnatal care visits and Vitamin A supplementation for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 ... 207

Figure 5.21: Maternal transfer from clinics to the district for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 209
Figure 5.22: Maternal drug availability for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017 210

LIST OF ANNEXURES

Annexure A: Declaration regarding plagiarism 331
Annexure B: Data collection instruments..... 332
Annexure C: Participant information leaflet and consent form 334
Annexure D: Ethical approvals 337
Annexure E: Data capturing sheet..... 342
Annexure F Summarised PAR cycles 343
Annexure G: Posters..... 344
Annexure H: Check-list 346
Annexure I: Birth prepardness information booklet..... 347
Annexure J: Ministry of Health and Child Care logo use approval letter 349
Annexure K: Qualitative Data Analysis Audit..... 350

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 Introduction

This thesis deals with utilisation of maternal healthcare services in a rural setting in Zimbabwe. The overall purpose of this study was to enhance utilisation of maternal healthcare services. It is important for women to utilise maternal healthcare services to ensure timely intervention when obstetric emergencies occur. Regardless of the socio-economic, structural, religious and cultural factors that influence utilisation of maternal healthcare services, the Mhondoro-Ngezi community collaboratively developed and implemented initiatives to enhance utilisation of maternal healthcare services during pregnancy, delivery and after delivery. In this Chapter, an overview of the thesis covering the background, rationale, problem statement, significance of the study, research question and objectives, philosophical foundation and the methodology is presented.

1.2 Background

Maternal mortality is a public health issue and is a cause for concern as most maternal deaths related to pregnancy complications can be prevented if women have access to skilled healthcare personnel and is supported by a functional healthcare system [Department for International Development (DFID), 2008:4]. Antenatal, intrapartal and postnatal services are meant to monitor and ensure the safety of pregnant women and their babies to prevent and reduce the incidence of maternal morbidity and mortality (Joshi, Mahalingam & Sorte, 2016:2170). Chomat, Solomons, Montenegro, Crowley and Bermuda (2014:113) observed that even when maternal healthcare services are functioning well, women with obstetric complications often face a variety of socio-economic, cultural, religious and geographical barriers to access health services which may affect timely maternal healthcare services utilisation. In this background, the researcher will provide an overview of the global, regional and national utilisation of maternal healthcare services and some initiatives that were developed elsewhere to enhance utilisation of maternal healthcare services.

1.2.1 Utilisation of maternal healthcare services and associated factors

Understanding factors influencing utilisation of maternal healthcare services is crucial for formulations of interventions. The following section will review literature on utilisation of maternal healthcare services and associated factors during antenatal, intrapartum and postnatal periods.

1.2.1.1 Antenatal care services utilisation and associated factors

Antenatal care (ANC), also known as prenatal care, refers to the regular medical and nursing care recommended for women during pregnancy to ensure healthy outcomes for women and their new born babies (Banda, 2013:6). The benefits of attending antenatal care during pregnancy include early detection of high risk pregnancies; detection and pre-treatment of existing and concurrent health problems; provision of advice and counselling on preventive care, improved nutrition during pregnancy, delivery and post natal care; timely referral to an appropriate health facility; preparedness and complication readiness for both normal and obstetric emergencies; and provision of tetanus toxoid, vitamin supplementation and antimalarial prophylaxis (Cumber, Diale, Stanly & Monju 2016:24 & World Health Organization [WHO], 2005:7). If women are unable to access the above services during the antenatal period women at risk would have been missed (Kawungezi, AkiiBua, Aleni, Chitayi, Niwaha, Kazibwe, Sunya, Mumbere, Mutesi, Tukai, Kasingaki & Nakabulwa, 2015:132). It is important to ascertain the extent of utilisation of maternal healthcare services during ANC because the coverage of ANC has been used globally as one of the indicators to track progress towards achieving universal access to reproductive health (Saad-Haddad, DeJong, Terreri, Resttrepo-Mendez, Perin, Vaz, Holly, et al, 2016:2).

Enablers for antenatal care utilisation include availability of resources such as trained health personnel, drugs and sundries to provide quality care, communication of benefits of ANC by health workers to the women and their families, male involvement, friendly and welcoming health personnel attitudes and good road network (Mangeni, Mwangi, Mbugua & Mukthar, 2012:375; Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), 2011:15). For example, women in Ghana, Kenya and Malawi reported that they attended antenatal care for monitoring of the progress of their pregnancy and to be checked for the position of the unborn baby (Pell, Menaca, Were, Afrah, Chatio, Manda-Taylor, Hamel, Hodgson, Tagbor, Kalilani, Ouma & Pool, 2013:5). Previous history of pregnancy related complications was a predictor to utilisation of antenatal and delivery care in Kombolcha district in Eastern Ethiopia (Ayele, Belayihun, Teji & Ayana, 2014:6).

The reasons cited in most studies for low utilisation of antenatal care services were incorrect knowledge of the required period for the first antenatal care attendance, absence of family support, lack of exposure to media, long waiting time, distance to the health facility, transport problems, religious and cultural beliefs and practices, lack of knowledge on the importance of antenatal care, higher parity and the qualifications of the health personnel (Joshi, Mahalingami & Sorte, 2016:2175; Chama-Chiliba & Koch, 2013: 82, 84; Ouendo, Sossa, Saizonou, Guedegbe, Mongbo, Mayaki & Quedraogo, 2015:223; Pell, Menaca, Were, Afrah, Chatio, Manda-Taylor, Hamal, Hodgson, Tagbor, Kalilani, Ouma &

Pool, 2013:5; Mandoreba & Mokwena, 2016:6). In a study conducted in Nigeria by Mojekwa and Ibekwe (2012:136), unfriendly staff attitudes, inadequate skills and shortage of essential drugs were cited as the reasons pregnant women did not access healthcare services.

Globally, 85% of pregnant women access antenatal care services (UNICEF, 2016:1). This is encouraging although unfortunately, few women initiate first ANC visit before 12 weeks of gestational period and complete the recommended minimum of eight antenatal visits (WHO, 2016:2574). It is imperative for women to come for subsequent antenatal care repeat visits to ensure regular pregnancy monitoring and prompt intervention of any arising complications. In a study conducted in Western Kenya, Southern Malawi, Northern and Central Ghana, previous or ongoing pregnancy related health problems prompted women to seek care at a health facility in early pregnancy (Pell, Menaca, Were, Afrah, Chatio, Manda-Taylor, Hamal, Hodgson, Tagbor, Kalilani, Ouma & Pool, 2013:5). In Nepal, for example, a study conducted showed a higher (69%) prevalence of women who attended at least four antenatal visits (Deo, Paudel, Khatri, Bhaskar, Paudel, Mehata & Wagle, 2015:1). Contrary to these results, in a study conducted in Makawanpur district of East Nepal, only 30.7% pregnant women attended at least four or more antenatal visits (Pandey & Karki, 2014:213). In India, Chandhiok, Dhillon, Kambo and Saxena (2006:51) and Bhimani, Vachhani and Khartha (2016:255) reported that women do not seek antenatal care and if they do, they book late as they do not perceive childbearing as a source of problems. This is a concern because the WHO (2002:52) recommends that pregnant women should initiate antenatal care within the first trimester of pregnancy to ensure at risk women are screened and monitored throughout pregnancy.

Utilisation of maternal healthcare services during the antenatal period in the African region varies from country to country. Some countries in sub-Saharan Africa report moderate to high utilisation of maternal healthcare services during the antenatal period while other countries report very low utilisation, ranging from 55% to 87% (USAID, 2011:9). UNICEF (2017:1) notes that only 42% of women receive at least four antenatal visits in sub-Saharan Africa yearly, a figure too low than that reported by USAID (2011) above. But what is clear in these countries is that, most women do not complete the recommended four antenatal visits. This could be attributed to late pregnancy booking. This is a concern as these women may end up not benefiting from the curative and preventive services offered during antenatal visits (Gross, Alba, Glass, Schellenberg & Obrist, 2012:1).

Low utilisation of antenatal care services during the first trimester was reported in Southern Benin rural in West Africa (Ouendo, Sossa, Saizonou, Guedegbe, Mongbo, Mayaki &

Quedraogo, 2015:223). In a study conducted in Zambia, more than 80% of the initial ANC were booked late in pregnancy (Chama-Chiliba, 2013:81). In Tanzania only 29% of pregnant women initiated the initial antenatal care attendance within the first four months of pregnancy (Gross, Alba, Glass, Schellenberg & Obrist, 2012:4). USAID (2011:20) also reports that over 90% of women in sub-Saharan countries obtain antenatal care from a doctor, nurse or midwife, but generally women rely heavily on nurses or midwives rather than doctors because of shortages of doctors. In all sub-Saharan countries, women living in urban areas have higher levels of use of skilled birth attendances than those residing in rural areas. More than half of women in the region receive two or more doses of tetanus toxoid injections and a very small proportion of women were offered and accepted HIV testing during antenatal care visits (USAID, 2011:32, 34). However, in a study conducted in Zambia, 60% of the participants attended at least four antenatal visits (Kyei, Chansa & Gabrysch, 2012:10).

Zimbabwe has sustained high antenatal care services utilisation. According to the 2015 Demographic Health Survey, 93% of women who gave birth in the 5 years preceding the survey received ANC from a trained health professional at least once for their last birth. The same survey reported that 76% of women had four or more ANC visits, showing 11% increase from the 2010-11 Zimbabwe demographic health survey (ZDHS) [United States Agency for International Development (USAID), Zimbabwe National Statistics Agency (ZIMSTAT), Ministry of Health and Child Care (MoHCC), UNFPA, United Kingdom Aid (UKAID), United Nations Development Programme (UNDP), UNICEF & Centre for Disease Control (CDC), (USAID, ZIMSTAT, MOHCC, UNFPA, UNDP, UNICEF, UKAID, Australian Aid, Europian Union & Sida, 2016:17]. In a survey done by ZIMSTAT, European Commission, UNDP, UNICEF & MCHIP (2014:157), among the women who had had a live birth during the two years preceding the survey, 92.3% reported that a blood sample was taken during antenatal visits, 89.4% had their blood pressure measured and 52.9% reported that a urine specimen was taken at least once during the antenatal visits. The survey further reports that the proportion of women who took both iron and folate tablets and were monitored for growth and development of the foetus is 64.9% and 83.5% respectively.

An overview of Zimbabwean studies showed that failure to recognise danger warning signs, gender discrimination, status of women, distance from the health centre (Munjanja, 2007:20), socio demographic factors, cultural and religious beliefs and practices (Elizabeth Glaser Pediatric AIDS Foundation [EGPAF], 2009:11; Choguya, 2014:5) and lack of knowledge of complications associated with pregnancies, fear of disclosing the pregnancy, unfriendly healthcare providers and use of traditional birth attendances during pregnancy

(Mlilo-Chaibva, 2007: 93) are some of the barriers to utilisation of maternal healthcare services. User fees that used to be a barrier to accessing maternal healthcare services are no longer charged in rural Zimbabwe with the adoption of the Health Transition Fund, a multi donor pooled fund in 2011 (Zimbabwe MoHCC & UNICEF, 2011:4).

Although the WHO (2016:2574) recommends initial booking within the first fourteen weeks of pregnancy, women in Zimbabwe often present late in pregnancy. For example, in a study conducted in urban Harare, Zimbabwe by Mandoraba and Mokwena (2016:136), half the participants had initiated first antenatal booking after the 24th week of gestation. In another study conducted by Musindo, Chideme-Munodawafa, Mhlanga and Ndaimana (2016:311) in a peri-urban setting in Zimbabwe, inaccessibility of antenatal care services over the weekends was cited as a reason for booking pregnancy late. Utilisation of maternal healthcare services among some religious groups in the country has also been low. For example, some studies done in Zimbabwe on the apostolic faith communities revealed that pregnant women do not utilise healthcare services but are attended to by medically untrained elderly church women (Muchabaiwa, Mazambani, Chigusiwa, Bindu & Mudavanhu, 2012:154).

Another study done in Zimbabwe by Collaborating Centre for Operational Research and Evaluation (CCORE), UNICEF and M-Consultant (2011:24) also noted that members of the ultra-conservative apostolic faith strongly believe that maternal care should only be offered by apostolic elderly women or women with special anointing or healing powers from the Holy Spirit. In the same study, it was reported that women experiencing obstetric complications were asked to confess their sins or alleged adulterous acts because the members believe only sin can cause problems during pregnancy. These findings corroborate with findings from some parts of Nigerian Christian states where relatives, mothers, husbands and religious leaders gathered and practiced religious prayers till the mother gives birth instead of taking the labouring woman to a health facility (Tsengay, 2010:40). Contrary to these results, in a study conducted in Nigeria by Al-Mujtaba, Cornelius, Galadanci, Erekaha, Okundaye, Adeyemi and Sam-Agudu (2016:6), both Muslims and Christians preferred using facility based maternal healthcare services. In rural India, no significant difference was found regarding utilisation of antenatal care services among the Hindus and Muslims (Bhimani, Vachhani & Kartha, 2015:256). The religious practices mentioned above prevent women from utilising healthcare services, resulting in the women missing the opportunities to detect complications associated with pregnancy early.

1.2.1.2 Intrapartum care services utilisation and associated factors

Quality of intrapartum care is important towards increasing utilisation of skilled attendance at birth (Kigenyi, Tefera, Nabiwemba, Orach, 2013:1). Institutional delivery by skilled heath personnel is recommended to all women to ensure emergency obstetric complications are attended to promptly. Institutional delivery means giving birth to a child in a health facility under the supervision of trained and competent skilled health personnel, where there are adequate and appropriate resources to save lives of both the mother and the child (Munjial, Kaushik & Agnihotri, 2009:131). Skilled care or attendance refers to the process by which a pregnant woman and her infant are provided with adequate care during pregnancy, labour, birth and the postpartum and immediate periods (UNFPA & University of Aberdeen, 2004:7). Skilled birth attendance by trained and qualified personnel is critical in ensuring safe maternity (Kesterton, Cleland, Slogget & Ronsmans, 2010:1; Sushmita, Glyn, Kishwarr, Abdul, Dharma, Bhim, Nirmala, Shibanand, More, Saville, Houwelling & Osrin, 2016:1). However, some women fail to deliver at a health facility and deliver at home, assisted by unskilled birth attendants, due to many factors such as lack of transport to ferry women in labour, distance to the nearest health facility and preference for traditional birth attendants or religious birth attendants (Stekelenburg, Kyanamina, Mukelabai, Wolffers & van Roosmalen, 2004:393; Pohjolainen, 2014:20).

An overview of studies (Joshi, Mahalingam & Sorte, 2016:2172; Tebekaw, Mashalla & Thupayagale-Tshweneaggae, 2015:4) has identified enablers of institutional deliveries such as previous history of complication, access to insurance coverage, mother’s knowledge about danger signs of pregnancy and availability of transport.

Institutional deliveries are recommended as a strategy to reduce maternal and neonatal morbidity and mortality (Exavery, Kante, Tani, Doctor, Hingora & Philips, 2014:13). However, access to institutional delivery is low in developing countries. According to UNICEF (2017:1), about one in four births take place without the assistance of a skilled birth attendant worldwide. Average proportions of births without assistance by skilled birth attendants range from about 50% in sub-Saharan Africa to 2% in Central and Eastern Europe and the Commonwealth of Independence States (UNICEF, 2017:1). There was a variation in overall rates of caesarean section in Europe in 2010, from 14.8% in Iceland to 52.2% in Cyprus (Macfarlane, Blondel, Mohangoo, Cutttini, Nijhuis, Novak, Olafsdottir, Zeitlin & the Euro- Peristat Scientific Committee, 2014:561).

A study conducted in Ethiopia by Tsegay, Gebrehiwot, Goicolea, Edin, Lemma and Sebastain (2013:5) showed very low rates (4,1%) for institutional delivery. In the same study, the majority (95,9%) of the women delivered at home and were assisted by family

members or elderly community members or neighbours. Reasons cited for delivering at home were consistent with those in Uganda and Nigeria (Kawungezi, Akiibua, Aleni, Chitayi, Niwaha, Kazibwe et. al 2015:139; Takai, Dlakwa, Bukar, Audu & Kwayabura, 2015:114) where easy labour, sudden onset of labour, transport problems, distance to health facility and user fees were cited. A study conducted in Timor–Leste in Asia (Khanal, Lee. de Cruz & Karkee, 2014:3) revealed that three quarters of women that resided in rural areas were not likely to utilise healthcare services during childbirth compared to urban women. Reasons cited for the poor utilisation were lack of financial freedom to pay for services. Consistent with these findings, incidental costs, socio-economic and religious factors were cited for poor utilisation of maternal healthcare services in Madhya state of India (Jat, Ng & Sebastain, 2011:40). Onward referral and lack of immediate care were cited as deterrent to utilisation of maternal healthcare services in South Wollo, in Ethiopia (Bedford, Gandhi, Girma & Admassu, 2012:4). Contrary to above findings, a high (85.4%) institutional delivery rate was reported in Eastern Uganda (Izudi & Amongin, 2015:162).

UNICEF (2017:1) reports that in sub-Saharan Africa 50% of all births are delivered in a health facility and the urban-rural gap is over 30%. USAID (2011:36) adds that the use of institutional facilities during delivery in sub-Saharan Africa is highest in Namibia (82%), Benin (81%) and Zimbabwe (70%) and lowest in Ethiopia (6%), Chad (13 %) and Niger (18%). Although most women may prefer to deliver at a health institution, long distance, lack of transport, user fees, lack of adequate education during the antenatal period and poor male involvement may act as barriers to institutional delivery (Abraha & Hurissa, 2014:1; Mageni, Mwangi, Mbugua & Mukthar, 2013:14). In Zambia, although 96% had indicated preferences to deliver at a health facility, only 54% of women delivered at a health institution (Stekelenburg, Kyanamina, Mukelabai, Wolfers & van Roosmalen, 2004:393). Negative nurse attitudes during previous deliveries and use of harsh and abusive language were also cited as reasons for not utilising maternal healthcare services during delivery (Sialubanje, Massar, Hamer & Ruiter, 2015:12).

Generally, there are high institutional deliveries in Zimbabwe. According to the Zimbabwe National Statistics Agency and ICF International (2016:18), 78% of women reported that their last live birth in the last 5 years was delivered by a skilled provider or health professional, an increase from 66% in 2010-11 ZDHS. The proportion of institutional deliveries varied from 66.9% in Manicaland Province to 94.8% in Bulawayo Province. In a survey done by ZIMSTAT, European Commission, UNDP, UNICEF and MCHIP (2014:160), 6% percent of women who delivered in the last two years prior to the survey had a caesarean section. The percentage of women who delivered in a health facility increased as the education level of the woman and wealth quintile of the household increased. In a

study done in Zimbabwe to investigate how demographic, socioeconomic and cultural factors determine maternal healthcare services utilisation, the odds for delivering at a health facility were higher among women who had attained higher education and among women from urban areas than those from rural areas (Muchabaiwa, Mazambani, Chigusiwa, Bindu & Mudavanhu, 2012:152). In the same study, traditionalists and apostolic women were 25% less likely to deliver at a health facility. A study conducted in Mutare district in Zimbabwe by Muranda (2014:67) revealed that 40% of the participants preferred home delivery to institutional delivery because of distance from home and negative health personnel attitudes.

1.2.1.3 Postnatal care services utilisation and associated factors

The postnatal period or puerperium is defined as the period beginning about one hour after the delivery of the placenta and extending through the next six weeks (USAID, 2001:51). Generally, there has been low utilisation of postnatal care services, yet major changes occur during this period and lack of appropriate care can result in ill health or death of the mother and the baby (WHO, 2014:6). Immediately after birth, bleeding and infection pose the greatest risk to the mother's life while asphyxia and severe infections pose great risk to the newborn baby (WHO, 2010:1). Lack of postnatal care may result in impairments and disabilities or death of women, newborns and children (Takai, Dlakwa, Bukar, Audu & Kwayabura, 2015:110). WHO (2017:1) reports that out of 2.9 million newborn deaths that occurred in 2012, about half of them occurred within the first 24 hours after birth. UNICEF (2008:52) also reports that approximately three quarters of maternal deaths occur during childbirth or the immediate postpartum period in developing countries. It is therefore critical to provide postnatal care immediately after delivery inorder to deliver lifesaving interventions for both the mother and newborn baby. The care given is directed towards prevention and early detection of diseases and complications to the mother and the newborn, counselling and offering advice on breast feeding, family planning, immunisation and maternal nutrition (USAID, 2001:51). An overview of studies highlighted barriers to low utilisation of postnatal care as distance to the health facility, lack of transport, lack of knowledge of the necessity for attending postnatal care, lack of awareness of postnatal care by women and their families, services too expensive and cultural beliefs (Takai, Dlakwa, Bukar, Audu & Kwayabura, 2015:112; Belachew, Taye & Belachew, 2016:1).

Enablers for utilisation of postnatal care include presence of complications after delivery, mode of delivery, place of delivery, scheduling of next postnatal visit and when there is a need to take a child for immunisation (Pomerai, 2011:40; Joshi, Mahalingam & Sorte, 2016:2174). Workineh and Hailu (2014:173) posit that postnatal care utilisation also

increases with increasing decision-making power of mothers and knowledge of postpartum obstetric complications.

Utilisation of postnatal care has been low globally. In Nepal, the 2011 Demographic Health Survey reported that less than half of the mothers attended at least one post natal care visit (Khanal, Adhikari, Karkee & Gavidia, 2014:4). Reasons given for poor utilisation of postnatal care services in selected hilly areas of Uttarakhand in India were distance from the health facility, doctor not available, better services at home, a current healthy pregnancy and lack of time due to household chores (Joshi, Mahalingam & Sorte, 2016:2173). In North Western Ethiopia and Jabitena district, Amhara region in Ethiopia, only 33.5% and 22.2% women reportedly utilised postnatal care services respectively (Limenih, Endale & Dachew, 2016:6; Workineh & Hailu, 2014:172) while in Eastern Uganda only 15.4% utilised early postnatal care (Izudi & Amongin, 2015:163). Results from a cross sectional study in Nigeria revealed that only 16.9% of the women had attended postnatal visits (Takai, Dlakwa, Bukar, Audu & Kwyabura, 2015:112). Reasons cited for low utilisation across studies were non-scheduling of visits by healthcare workers, lack of knowledge on importance of postnatal care and non-availability of postnatal care services, distance to health facility, lack of funds, husband not allowing the wife to attend and cultural beliefs (Pomerai, 2011:40; Takai, Dlakwa, Bukar, Audu & Kwyabura, 2015:114).

Utilisation of postnatal care services is generally low in the African region (USAID, 2011:58). In Malawi two thirds of women who deliver at a health institution do not return for a postnatal review after one day and at six weeks (Sakala & Kazembe, 2011:1). In Swaziland, over three quarters of women do not use postnatal care because they do not see any reason to go for review especially if they do not have any problems (Tsawe, Moto, Netshivhera, Nyathi & Susuman, 2015:5, 10). In Botswana, Letamo and Rakgoasi (2003:44) report that teenage mothers were six times more likely not to have postnatal care compared to older women. Only 16.9% of women attended postnatal care in a study conducted by Takai, Dlakwa, Bukar, Audu and Kwayabura (2015:111) in Nigeria and the reason cited was lack of awareness. This percentage is lower than that reported in Tanzania where 71.6% utilised postnatal care services within the stipulated times (Lwelamira, Safari & Stephen, 2015:108).

According to the Zimbabwe National Statistics Agency (ZIMSTAT, 2015:165) an overall of 83.5% of women who gave birth in a health facility stayed 12 hours or more in the facility after delivery and 77% spent at least a day in the facility. Nearly all women who had given birth through caesarean section had stayed 12 hours or more in the facility after giving birth. The Zimbabwe Demographic Health Survey (2015:18) reports that 51.1% of women had

postnatal care in the first two days after birth with the least (36.1%) being reported in Masvingo Province and the highest attendance was reported in Matebeleland South (79.4%). Studies conducted in Zimbabwe have highlighted varying utilisation of postnatal services after discharge. In Kuwadzana peri-urban area in Zvimba, Mashonaland West Province, the majority (89%) of women had attended six weeks post natal review (Hove, Siziya, Katito & Tshimanga, 1999:27). The reason cited for those who did not attend (11%) were religious beliefs and the perception that there is no need because they experienced no problems. In Bikita District in Masvingo Province, Zimbabwe, women with three or more children, uneducated and with unemployed husbands were associated with low uptake of postnatal services (Pomerai, 2011:40). At St. Joseph Clinic in Chishawasha in rural Mashonaland East Zimbabwe, 66.7% attended six-week postnatal care (Makumbe, 2001:64). Varied reasons were highlighted ranging from the need for growth monitoring for their babies, accessing of family planning services and to not feeling well.

1.2.2 Initiatives to enhance utilisation of maternal healthcare services

Although above mentioned studies examined factors influencing utilisation of maternal healthcare services, some gaps still exist on strategy formulation to improve individual, household and community behaviour and norms regarding maternal healthcare services utilisation. There has been growing recognition that, providing education and knowledge at an individual level is not enough to promote changes in behaviour (MacKain, 2003:3). This is because underlying factors influencing utilisation of healthcare services operate at inter-related levels of social influence, namely, family and peers, the community in which women reside, the healthcare services available to them and wider cultural norms and values (UNDP, 2011:12). MacKain (2003:3) reiterates that factors promoting utilisation of healthcare services are not solely rooted in the individual, but have more dynamic, collective and interactive elements, hence initiatives to enhance utilisation of maternal healthcare services should be developed in collaboration with women and the community.

Strategies that have been adopted in settings in Nigeria and South Africa to influence utilisation of maternal healthcare services include use of trained mentor mothers (from mother to mother), offering peer support and encouraging women to access prevention of parent to child transmission (PMTCT) of HIV services during pregnancy (Sam-Agudu, Llewellyn, Cornelius, Okundaye, et al, 2014:134; Al-Mujtab, Cornelius, Galadanci, Erekaha, Okundaye, Adeyemi; Sam-Agudu, 2016:5 & 2012:344). In South Ari and Malle districts, Ethiopia, aligning immunisation with pastoral life style and work played a major role in improving maternal and child health service utilisation (Kabebe, Getachew, Seyum & Negash, 2012:120). A community based maternal and neonatal program in rural Nepal, focusing on antenatal and early postnatal home visits by female community health

volunteers, increased the coverage of women receiving maternal health care services (USAID, Nepal Family Health Program & John Hopkins, 2007:8).

As the world comes to the post Millennium Development Goal (MDG) era which has been replaced by the Sustainable Development Goals (SDGs), the United States Agency for International Development (USAID) Maternal Health Strategy 2014-2020 suggests strategies towards ending preventable maternal mortality. The first strategy calls for improving individual, household and community behaviour in the home, community and larger societal environment and improving equity of access to healthcare services by the most vulnerable people (USAID, 2014:16). In the same vein, SDG three calls for reduction of the global maternal mortality ratio to less than 70 per 100 000 live births by 2030 (WHO, 2015:10). Hence, a potential strategy for reducing the maternal mortality in high burden countries such as Zimbabwe is to involve the individual and community in identifying their problems, understanding root causes and mobilising necessary resources (USAID, 2014:16) to enhance utilisation of maternal healthcare services. Community participation has gained momentum as a new approach that seeks to bring together all stakeholders in addressing health issues affecting the communities (UNDP, UNICEF, WHO & World Bank Special Programme of Research Development and Research Training in Human Reproduction, 2002:5). This paradigm shift has seen health program developers moving beyond the traditional health focus of concentrating on altering individual behaviour to a holistic approach of involving all stakeholders.

1.3 Rationale

Failure to utilise maternal healthcare services contributes to maternal and neonatal morbidity and mortality (World Bank, 2006:2), as emergency obstetric complications are not attended to promptly because women can not access skilled health personnel. Maternal mortality is a public health problem (Mlambo, Chinamo & Zingwe, 2013:615). A death of a mother is a significant burden not only to the immediate family, but also the community, economically and socially. Improving utilisation of maternal healthcare services, therefore, need to be addressed with full participation and involvement of all stakeholders. Participatory action research that involved the community members, postnatal women and maternal health care providers in exploring maternal healthcare utilisation and formulating initiatives, generated knowledge that is relevant, meaningful and useful locally and beyond. The design of the initiatives was informed by suggestions made by the United Nations (UN) concept paper (2013:8) report and Zimbabwe Ministry of Health and Child Care, EGPAF, USAID & UKAID (2012:10) suggestions on strategies to reduce maternal mortality in Zimbabwe.

1.4 Problem statement

Poor utilisation of maternal healthcare services in Zimbabwe is a cause of concern. One reason might be that obstetric complications are not attended to promptly by trained health personnel leading to poor pregnancy outcomes. Although utilisation of maternal healthcare services early in pregnancy reduces the incidence of neonatal and maternal mortality and morbidity, barriers exist in Zimbabwe in utilisation of maternal healthcare services as the following overview of Zimbabwean studies indicates. Fifty-six percent of maternal deaths are due to a delay in utilising maternal healthcare services (Munjanja, 2007:17) and about 57% of mothers do not utilise postnatal services (USAID et al., 2011:118). Although 70% of mothers received antenatal care at least four times, only 31.2% of women with a live birth during 2012-2014 had their first antenatal care visit within the first trimester (ZIMSTAT, European Commission, UNDP, UNFPA, UNICE & MCHIP, 2014:154), when early detection of complications can occur during antenatal care. Zimbabwe's maternal mortality stands at 614 per 100 000 live births (ZIMSTAT et al., 2014:179), of which most deaths are caused by conditions that could have been treated successfully with access to emergency obstetric care (Nieburg, 2012:10). In Zimbabwe, about 6% of births are assisted by traditional birth attendants, 9% by untrained relatives or friends and 3% are unassisted (ZIMSTAT et al., 2014:163), increasing the incidence of maternal and neonatal morbidity and mortality (Munjanja, 2007:17). These incidences of poor utilisation of maternal healthcare services during delivery are worse in rural Zimbabwe because socio-cultural and religious factors play a significant role (Muchabaya et al, 2012:155).

When a maternal death occurs, the family loses a loved one; the community loses a productive member while the country loses its investment in the woman's health and education (DFID, 2004:6). The survival of older children is also affected by the loss of a mother. The United Nations (2013:1) noted that, for every woman who dies from pregnancy related complications, an estimated 20 women suffer from permanent or long-term physical, social or emotional disabilities. Apart from maternal death, the following complications may also occur during pregnancy and/or childbirth: severe anaemia, infertility, damage to the uterus and obstetric fistulas with urinary or faecal incontinence.

Barriers to utilisation of maternal healthcare services exist, even more so in the rural areas where 60% of the Zimbabwean population resides (ZIMSTAT, 2012:9). Mashonaland West province was selected for the study because it was cited by Loewenson, Kadungure and Shamu (2012:4) as one of the provinces where there is poor maternal and child healthcare cover relative to need. Addressing maternal healthcare utilisation is the cornerstone of efforts to reduce maternal morbidity and mortality yet, there is no evidence based on how to

best promote it in different settings. No studies have been conducted on maternal healthcare services utilisation nor have any initiatives been developed to enhance maternal healthcare services utilisation in Mhondoro-Ngezi district. This study therefore aimed to fill that gap in the research by developing initiatives that are aligned to the Mhondoro-Ngezi district context to enhance utilisation of maternal healthcare services.

1.5 Context

In Zimbabwe, the Ministry of Health and Child Care (MoHCC) is the custodian of health. Most of the healthcare services in the country are provided by the public sector, non-profit organisations, church organisations, company- operated clinics and for-profit clinics. Traditional and religious medicine sectors also exist and offer services for a variety of illnesses (Osika, Altman, Ekbladh, Karzt, Nguyen, Williamson & Tapera, 2011:11). Coordination, promotion of health services and care in Zimbabwe are divided into primary, secondary, tertiary and quaternary levels. Health care at primary level consists of basic prevention, maternity and curative services. Healthcare services are provided by primary care nurses and village health workers. Primary care facilities are administered by community, ward and rural communities under the supervision of the district health officer. There are no doctors working at primary health centres. Basic emergency obstetric care is offered at primary health care centres. The services offered at district hospitals expand beyond curative and rehabilitative to include health promotion, preventive care and health education. Tertiary level care has specialist services. Comprehensive emergency obstetric care is offered at the district and provincial hospitals. Quaternary or central care has advanced equipment, staff and pharmaceutical support for dealing with severe cases. Because the quaternary care has more specialists and clinicians, it acts as the highest level of health referrals.

The study was conducted at primary and secondary levels, at Murambwa Clinic and St. Michaels' Mission Hospital in Mhondoro-Ngezi district in Mashonaland West Province. The rationale for choosing Mashonaland West Province is that, it is one of the provinces where there was poor maternal and child health cover relative to need (Loewnson et al., 2012:4). It was also chosen because of its accessibility to the researcher. Maternal healthcare services in Mhondoro-Ngezi district are subsidised by the Results Based Financing. Results-Based Financing links financing to pre-determined results, with payment made only upon verification that the agreed results have been delivered (World Bank, 2013:1). The Results-Based Financing was rolled out in Zimbabwe in 2014 to supplement the Health Transition Fund which was put in place in 2011 by donor agencies to address maternal and child health issues (MoHCC & UNICEF, 2011:4). The Results-Based Financing has improved provision of resources and boosted staff morale. Some facilities have used the

funding to renovate outdated buildings such as repainting, repairing water leaks and buying new windows, roofs, toilets, sewer water tanks, solar panels and generators as well as for paying incentives to motivate staff (The World Bank, 2012:3).

Zimbabwe has always provided a comprehensive package of maternal and child health services. Maternal healthcare service in Zimbabwe is rendered free of charge in rural government and mission institutions. Economic and political challenges have reversed the positive gains in providing primary health care to all that had been made since the attainment of independence in 1980. The Zimbabwean government has accelerated provision of reproductive health services by the adoption of regional and international strategies and protocols such as the Safe Motherhood Initiatives (1987), Emergency Obstetric Care (2006) and Saving Mothers, Giving Life initiatives (2012), the National Adolescent Sexual and Reproductive Health Strategy (2010-2015), the Zimbabwe National Maternal and Neonatal Road Map (2007-2015) and Keeping Mothers and Families Alive (2011-2015) (EGPAF, 2013:9) and Campaign on Accelerated Reduction of Maternal Mortality in Africa (CARMMA) in 2009.

The study was undertaken in Mhondoro-Ngezi district which is one of the seven districts in Mashonaland West Province. The district shares boundaries with Chikomba district on the eastern side, Chegutu district on the northern side, Sanyati district on the western side and Gokwe south district on the southern side. Mhondoro-Ngezi district consists of 19 health facilities and of these, 17 are maternal healthcare clinics consisting of six government institutions, nine rural district councils, one mission institution, one military institution and one private institution. According to the Mhondoro-Ngezi unpublished annual report (2015:1), the total population for the whole district was 111 709, women of child bearing age 27 034, expected pregnancies 4 949 and expected deliveries 1 450. Mhondoro-Ngezi district consists of peasant farmers, small scale miners and mine workers.

St. Michaels Mission Hospital serves as the the district hospital and was also the study site. The hospital belongs to the Roman Catholic Church, but it is jointly managed by the church and the Ministry of Health and Child Care. The St Michaels Hospital Annual Report (2015:1) states that the total population was 4633, women of child bearing age was 1121 and expected pregnancies were 205. The services offered at St. Michaels included antenatal, delivery and postnatal care. During antenatal care, the hospital offered care in routine screening and examination, provision of tetanus toxoid vaccines, prevention of maternal to child transmission (PMTCT) of HIV services, urine tests, haemoglobin test, screening for syphilis (rapid plasma reagent test) and provision of anti-malaria prophylaxis. During delivery, the services offered included routine examination, normal vertex deliveries and

PMTCT services. In the postnatal period women were offered routine examination and were counselled on family planning services. Because the hospital is a mission hospital, family planning services are not offered, instead the clients are counselled on preferred contraceptives and referred to the next health facility if they needed any.

1.6 Significance of the Study

The study aimed to build on the strengths of existing networks of individuals, families, the community, public sector and civil organisations to develop initiatives that would enhance utilisation of maternal healthcare services.

- **Nursing research**

The findings of this study may be useful to other healthcare disciplines that would want to use participatory action research (PAR) as a research methodology. Since PAR involves conducting the research with the community, this encourages community members to be actively involved in health matters that affect their lives, ultimately empowering them.

- **Nursing education**

The use of PAR may inform nursing education in the development of some aspects in the curricula. These findings may also add to the existing body of scientific knowledge in public health and most specifically in midwifery practice and education.

- **Midwifery practice**

The findings may guide reproductive health planners and policy makers towards a coherent response to problems in utilisation of maternal healthcare services. The initiative may have an impact on policy development, local authority planning and healthcare delivery. Imparting of the critical theory may influence participants in the study context to critique the status quo and enhance the utilisation of maternal healthcare services.

1.7 Research questions

The research questions were as follows:

1. What socio-cultural, economic, religious and operational factors influence utisation of maternal healthcare services in Mhondoro-Ngezi district in rural Mashonaland West Province, Zimbabwe?
2. What initiatives can be developed for enhancing the utilisation of maternal healthcare services in Mhondoro-Ngezi district in rural Mashonaland West Province, Zimbabwe?

1.8 Aim and objectives

The aim of this PAR was to develop initiatives to enhance utilisation of maternal healthcare services in Mhondoro-Ngezi district in Mashonaland West Province. All objectives referred to healthcare services in the said district. Three research cycles, each with its own objectives, were conducted with a co-operative inquiry group (CIG).

Cycle 1: Situation analysis to obtain baseline data on the utilisation of maternal healthcare services.

Objective 1.1: To describe baseline data on maternal morbidity and mortality rates and maternal healthcare services utilisation in Mhondoro Ngezi district in Mashonaland West Province.

Objective 1.2: To explore and describe maternal healthcare services utilisation in Mhondoro-Ngezi district in Mashonaland West Province.

Cycle 2: Develop and implement initiatives to enhance utilisation of maternal healthcare services.

Objective 2.1: To describe the development and implementation of the initiatives to enhance utilisation of maternal healthcare services in Mhondoro-Ngezi district in Mashonaland West Province.

Cycle 3: Evaluate the effect of the implemented initiatives

Objective 3.1: To compare maternal morbidity and mortality rates with baseline data after implementation of the initiatives to enhance utilisation of maternal healthcare services.

Objective 3.2: To compare maternal health care services utilisation with baseline data after implementation of the initiatives to enhance utilisation of maternal healthcare services.

Objective 3.3: To describe the CIG members' reflection on implementation of the initiatives to enhance utilisation of maternal healthcare services.

1.9 Concepts clarification

In this section the concepts of the study are defined and their application in the study clarified.

- **Participatory action research (PAR)**

Powers and Allaman (2012:1) define PAR as a 'process through which people investigates meaningful social topics, participate in research to understand the root causes of problems that directly impact them and then act to influence policies. In this study, the CIG members and the researcher collaborated in the research process of planning, observing, acting and

evaluation of initiatives for enhancing utilisation of maternal healthcare services in rural Mhondoro- Ngezi district in Mashonaland West Province, Zimbabwe.

- **Maternal mortality**

The International Statistical Classification of Diseases (ICD)-10:3 (WHO: 2011:156) defines maternal mortality as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. In this study, maternal mortality is referred to as the death of a woman during pregnancy, delivery and during the postnatal period up to six weeks after giving birth, irrespective of the duration and site of the pregnancy from any cause related to or aggravated by the pregnancy, or its management, but not from accidental or incidental causes.

- **Maternal healthcare services**

Maternal healthcare services are services provided by healthcare service providers to promote, restore or maintain maternal health (WHO, 2004:28). In this study, maternal health care services included care provided during antenatal, intrapartum and in the postnatal period to promote, restore and maintain maternal health.

- **Initiative**

Initiative is the exercising of the power or ability to suggest or perform a plan or task which is instrumental to the solving of the problem at hand. It is the start of something with the hope that it will continue (Cohen, Morgan & Pollack, 1992:13). In this study, the researcher in collaboration with community stakeholders planned, developed and implemented initiatives that enhanced utilisation of maternal healthcare services.

- **Utilisation**

Utilisation is the outcome of the interaction between health professionals and the patient (Donabedian, 1978 *quoted in* Da Silva, Contandriopoulos, Pineault & Tousignant, 2011: e107). In this study, utilisation referred to interaction between maternal healthcare providers and women in accessing maternal healthcare services during pregnancy, delivery and after delivery up to six weeks.

- **Enhance**

Enhance means to intensify, increase, or further improve the quality, value, or extent of something (Swannell, 1994:34). In this study, the developed initiatives were expected to improve utilisation of maternal healthcare services.

- **Community stakeholder**

A community stakeholder is a person or a group with a vested interest, involvement or may be affected by or influence an effort (Stanton, 2008:9). In this study, community stakeholders were postnatal women, community members and healthcare providers who had an interest in maternal healthcare issues.

- **A midwife**

A midwife is defined as a person who has been educated and trained in proficiency in the International Confederation of Midwives (ICM) Essential Competencies for Basic Midwifery Practice, demonstrates competencies in the practice of midwifery and is legally permitted to use this title (ICM Global Standards for Midwifery Regulations, 2010:10). In Zimbabwe and in this study, a midwife is a Registered General nurse who has undergone an additional one-year midwifery training post General Nursing training and is registered to practice with the Nurses Council of Zimbabwe.

- **A headman**

According to the Zimbabwean Traditional Leaders Act 29:17 (2001), a headman is a person appointed by the chief. Duties of a headman include assisting the chief, carry out lawful and reasonable orders given by the chief, to mediate in local disputes and to keep a register of villagers and village heads under him.

1.10 Delineation

The study focused on using PAR to influence utilisation of maternal healthcare services in rural Mhondoro-Ngezi district. All influences on utilisation of maternal healthcare services in rural Mhondoro-Ngezi district were of interest to the researcher.

1.11 Research design and methodology

Research design is a plan of action that directs how a research should be conducted to answer the research question (Hoskins & Mariano, 2004:28, Bhattacherjee, 2012:21). The PAR design was used to direct this study. The advantage of using PAR in this study is that, it allowed the researcher to use multiple methods of data collection. Quantitative data was collected first followed by qualitative data. The researcher and the participants explored the participants' experiences on maternal healthcare services utilisation. This approach was

chosen because it permitted information sharing between the researcher and the participant, thereby affording them both an opportunity to share and learn (Khan & Chovanec, 2010: 35).

The methodology will be discussed in detail in Chapter 2 and in this Chapter an overview of the methodology will be highlighted. Methodology describes several aspects of a study such as design, procedures for data collection, methods of data analysis and sampling procedures (Willis, 2007:14).

This study was guided by a cooperative inquiry group (CIG) method as suggested by Bob Mash (Mash, 2013:3, Mash & Meulenberg- Buskens, 2001:1108). A CIG consists of a group of people who share a common concern and interest for a specific issue in a specific personal, professional or social arena (Reason & McArdle, 2004:4) while reflecting on issues at hand and changing the practice (Mash & Meulenberg-Buskens, 2001:1109). In this study, the CIG consisted of community stakeholders (maternal healthcare providers, community members and postnatal women) who had an interest in maternal health issues. Involving the community ensured that culturally appropriate and acceptable initiatives were developed. The advantage of using this approach was that the insight and ideas generated were open for sharing and discussion with all stakeholders and any decisions that were made regarding the intended change were reached through consensus (Ellis, 2010:114). After presentation of the findings from the situational analysis to the community members during community meetings, nine CIG members were recruited using the purposive sampling technique. The group engaged in repeated cycles (Figure 1.1) of planning, acting, observing and reflecting (Mash & Meulenberg-Buskens, 2001:1108) and the experiences of and learning from action and transforming reality became the input for a new cycle of collective and self-reflective actions (Loewneson, et al, 2014:14).

The focus of Cycle 1 was to obtain baseline data on maternal morbidity and mortality and maternal healthcare services utilisation from the clinics and hospital registers, as well as from reports on maternal mortality meetings. Three focus group discussions were held with community members, maternal healthcare providers and postnatal women on maternal healthcare services utilisation. A literature search on global utilisation of maternal healthcare services during pregnancy, labour and after delivery was conducted by the researcher to ascertain factors influencing utilisation of maternal healthcare services and what initiatives were used elsewhere to enhance utilization of maternal healthcare services. In Cycle 2, the researcher presented findings of the situational analysis to the community members and a CIG was formed with community stakeholders to develop and implement the initiatives. Cycle 3 involved evaluation of the developed initiatives. The CIG members

compared the results from Cycle 1 with results from Cycle 3 to ascertain if the initiatives enhanced utilisation of maternal healthcare services (See figure 1.1 for illustration of the cycles).

The CIG members were trained in the PAR process. The training emphasised the need for reflection and documentation of experiences, thoughts and feelings in a personal journal. Group norms, such as channels of communication, respect for others, trust and confidentiality were agreed upon. At each meeting, the CIG members reflected on the experiences of each member and discussed the way forward. The advantage of using this approach was that, the insight and ideas generated were open for sharing and discussion with all stakeholders and any decisions that were made regarding the intended change were reached through consensus as suggested by Ellis (2010:114) and Heron and Reason (1996:2). The role of the researcher was that of an outsider (Herr & Anderson, 2004:3) because the researcher did not reside in the area neither did she work in the province or district under study. The researcher facilitated enhancement of utilisation of maternal healthcare services using the research process and enabled the CIG members to collectively share, analyse and validate their experiences as suggested by Loewenson, Laurell, Hogstedt, D'Ambruoss and Shroff (2014:24).

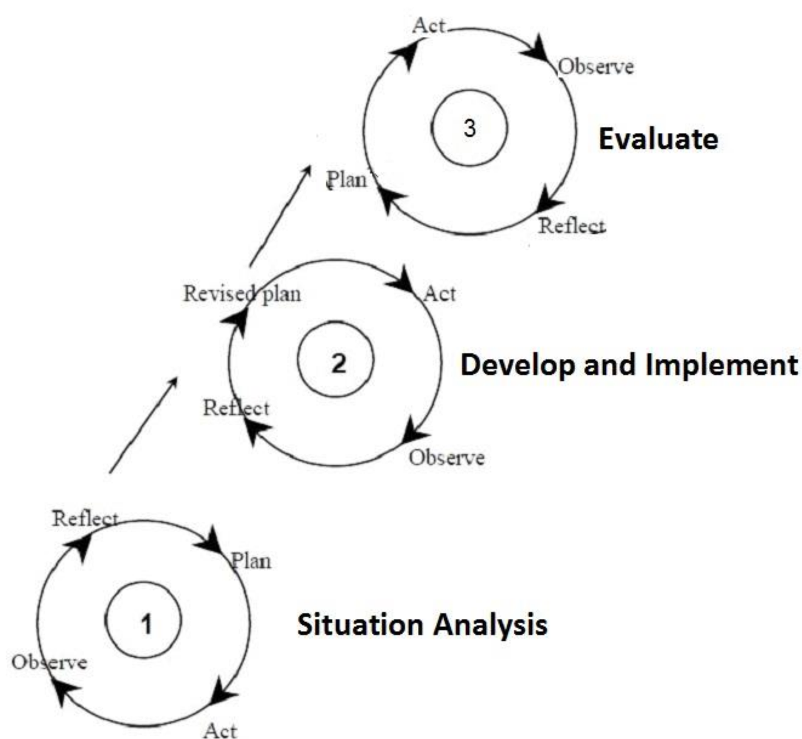


Figure 1.1: The spiral of action research cycles (Adopted from Zuber- Skerritt, 2001:22)

Multiple methods were used to collect and analyse data. Multiple methods involve using both quantitative and qualitative data in the same study to answer research questions (Creswell, 2012:22). The researcher chose multiple methods that involved sequential quantitative and qualitative data collection and analysis. Quantitative data was collected first followed by qualitative data and then quantitative data again. The data that was generated by the CIG members were captured using an audio recorder, field notes and minutes of the meetings. At the end of the research process, the CIG members and the researcher reviewed the whole inquiry process and the summary documents to reach consensus on the results. Analysis on all quantitative and qualitative data collected during the study was done. Quantitative data was analysed using the Strata software programme version 14.0. Descriptive and inferential statistics were used to analyse the data. Qualitative data was analysed using Tesch's (1990) method of content analysis. Table 1.1 shows a summary of the PAR cycles that were used in this study, which will be discussed in depth in chapter 2.

The researcher sought permission from the Ethics Committee of the Faculty of Health Sciences, University of Pretoria; Zimbabwe Medical Research Council, Zimbabwe Ministry of Health and Child Care, Harare Central Hospital (refer to Annexure D) and community leaders to undertake the study in Mhondoro-Ngezi district before undertaking the situation analysis.

Table 1.1: Summarised Participatory Action Research Cycles

PAR Cycle	Objective	Data	Population/ Sample	Data collection	Data Analysis	Rigour
Cycle1 Situation analysis	Compile the maternal morbidity and mortality baseline data for Mhondoro-Ngezi district in Mashonaland West Province and evaluate the available resources	Quantitative	Records and documentation, incident reports and statistics, reports from maternal mortality meetings and attendance registers	Checklist (Annexure H)	Statistical analysis	*Validity:* A pre-test of the instrument to test validity *Reliability:* Effort to ensure data are recorded, compiled and analyzed accurately
	Obtain in-depth data on maternal healthcare services utilisation in Mhondoro-Ngezi district in Mashonaland West Povince.	Qualitative	Maternal healthcare providers, community members and postnatal women/ Purposive sampling	Focus groups with community members, maternal healthcare providers and postnatal women supplemented with field notes	Content analysis	*Credibility:* Audio-recording of all interviews to capture all the data. *Transferability*: The methodology and study setting were described in detail
Cycle 2 Develop and implement	**Plan:** Plan the CIG and develop the initiatives to enhance utilisation of maternal healthcare services in Mhondoro-Ngezi district	Qualitative	CIG members/ Purposive method	Reflective journals and minutes of meetings	Content analysis	*Confirmability:* Member checking by the CIG members after data analysis.
	Observe: Observe the implementation of the developed initiatives	Quantitative and Qualitative (Multiple methods)	Attendance registers, records, documents and reports from maternal mortality meetings	Checklist Field notes Observations	Statistical analysis and content analysis	*Internal consistency of instrument:* Cronbach's alpha *Dependability:* Assessed by the supervisors and maternal health experts from the district *Credibility:* Meticulous data management and analysis

	Reflect: Reflect and evaluate on the developed and implemented initiatives to enhance utilisation of maternal healthcare services.	Qualitative	CIG member/ Purposive method	Reflective journals and minutes of meetings	Content analysis	*Confirmability:* Encourage discussions during CIG meetings
Cycle 3 Evaluate the effect	Compile the maternal morbidity and mortality rates with baseline data for Mhondoro-Ngezi district in Mashonaland West Province and available resources to evaluate the utilisation of maternal healthcare services.	Quantitative	Records and documentation, incident reports and statistics, reports from maternal mortality meetings and attendance registers	Checklist (Annexure H)	Statistical analysis	*Reliability:* Effort to ensure data are recorded, compiled and analysed accurately
	Obtain in-depth data on maternal healthcare services utilisation in Mhondoro-Ngezi district in Mashonaland West Province.	Qualitative	Maternal healthcare providers, community members and postnatal women/ Purposive method	Focus groups with maternal healthcare providers, community members and post natal women supplemented with field notes	Content analysis	*Dependability:* Assessed by the supervisors and maternal health experts from the district *Confirmability*: member checking by the CIG member after data analysis.
	Describe the CIG members' reflection on implementation of the initiatives to influence utilisation of maternal healthcare services.	Qualitative	CIG members/ Purposive method	Reflective journals and minutes of meetings	Content analysis	*Confirmability:* Encourage discussions during CIG meetings.

1.12 Rigour

Trustworthiness will be used for qualitative phases of the study and validity and reliability will be used for quantitative phases.

1.12.1Trustworthiness

The criteria for trustworthiness will be discussed in detail in the methodology chapter. Trustworthiness is defined by Lo-Biondo-Wood & Haber (2010:588) as the rigour of qualitative research. According to Lincoln and Guba (1985) credibility, transferability, dependability, confirmability and authenticity ensure academic rigour in qualitative research. These will be discussed in detail in chapter 2.

1.12.2 Reliability and validity

Validity and reliability are used to refer to the rigour of the quantitative phases of the study as discussed in chapter 2.

1.13 Ethical Considerations

Inherent in all research is the demand for the protection of human subjects (LoBiondo & Haber, 2010:117) and qualitative research is no exception. Guba and Lincoln (1994:115) observe that ethics is intrinsic to the critical paradigm, as implied by its intent to erode ignorance and misapprehension, taking full account of values and historical situatedness in the inquiry process. Reza (2007:35) notes that because PAR is a consensus-based approach and the research agenda is guided by all involved in the research, the potential risk for ethical violation is minimised.

Because of the collaborative nature of this research, ethical issues may arise during the research process (Creswell, 2013:588). Ethical clearance was sought from the Ethics Committee of the Faculty of Health Sciences, University of Pretoria and the Medical Research Council of Zimbabwe (Annexure D). The study site was approved by the Zimbabwe Ministry of Health and Child Care and Harare Central Hospital Ethical Committee and community leaders.

Collaborating with the community is quite difficult as one must continuously renegotiate in the cycles of planning, implementing, observing and evaluating. Lo-Biondo-Wood and Haber (2010:574) presented the ethical principles of beneficence (doing good), respect for human dignity and justice (fairness) that should be adhered to when conducting research.

- **Beneficence**

Beneficence is an obligation to act to benefit others and to maximise possible benefits (LoBiondo-Wood & Haber, 2010: 574). In PAR, harm to participants can result from dissemination of results or from participation in the research process (Sandretto, 2007:5). During data collection, participants' names were not asked for, instead participants were given identification numbers and demographic data were not linked to the transcribed scripts. The participants were treated with respect and their decisions and contributions in the PAR process were respected. The researcher ensured that the study participants were not exposed to psychological harm in the process of exploring utilisation of maternal healthcare services. When publishing results, issues of confidentiality and anonymity will be adhered to, through ensuring the names of the participants are not mentioned in documents, reports, reflective journals or in publications.

- **Respect for human dignity**

Respect for human dignity implies that people have the right to self-determination and full disclosure (LoBiondo-Wood & Haber, 2010:250). Participant information and consent document (Annexure C) describing the nature of the study, its purpose and the extent of involvement of the participants, were explained and given to the participants. The participants were made aware that their participation in the study was voluntary and the participants had the freedom to withdraw from the study anytime without any unfavourable actions on them by the researcher or the health personnel. One CIG member withdrew from the study due to other commitments. Written informed consent was sought from the individual participant to show their willingness to participate in the study and they retained a copy. The consent also had the contact details of the researcher in case the participants needed clarity on some issues pertaining to the study.

To ensure confidentiality and anonymity, all information linked to the participants did not have their names; instead code numbers were used to identify the participants. The information will be kept under lock and key for 15 years at the researcher's office to prevent theft and loss of data. The participants were also assured that their identities would remain anonymous even in the final report. Permission was obtained from the Mhondoro-Ngezi District Hospital and Harare Central Hospital authorities to access medical records (Annexure D). To ensure confidentiality, the medical records were reviewed without revealing the participants' identities (Ashwinkumar & Anandakumar, 2010:7). The CIG members and focus group members were informed that confidentiality cannot be absolute, but members were requested to honour confidentiality. When publishing results, issues of

confidentiality will be adhered to, through ensuring the names of the participants are not mentioned in documents, reports, reflective journals or publications. The CIG members as co-researchers were treated with respect and were involved collaboratively in all phases of the research as suggested by Creswell (2012:592). Ground rules were established at the onset of the study. For example, CIG members agreed to respect each other's contribution, to allow freedom of expression of opinion and to keep CIG discussions confidential.

- **Justice**

Justice implies that human subjects should be treated fairly (LoBiondo-Wood & Haber, 2010:250). The participants were recruited without favour or prejudice. Employing a multistage sampling method to identify the district with a high maternal mortality rate in the province, ensured that sampling of the study site was done fairly.

Ethical clearance was sought from the Ethics Committee of the University of Pretoria, Faculty of Health Sciences, Medical Research Council of Zimbabwe and the study site approval from the Zimbabwe Ministry of Health and Child Care, Harare Central Hospital Ethics Committee and community leaders. Written informed consent was sought from the individual participants (Annexure D).

1.14 Organisation of the Chapters

Table 1.2 shows the organisation of the thesis chapters.

Table 1.2: Organisation of the thesis chapters

Chapter	Heading
1	Overview of the study
2	Philosophical Foundation and Methodology
3	Findings of Cycle 1 and literature control
4	Development and implementation of the initiatives
5	Findings of Cycle 3 and literature control
6	Conclusion, recommendations and limitations

1.15 Conclusion

Chapter 1 provided an overview of the study. The philosophical foundations and methodology will be discussed in more detail in Chapter 2.

CHAPTER 2

PHILOSOPHICAL FOUNDATION AND METHODOLOGY

2.1 Introduction

Chapter one gave an overview of the research project. This chapter presents the underlying paradigm, its philosophical assumptions, the research design and method, procedures for data collection and analysis as well as ethical considerations. The assumptions of critical theory provided the paradigm for the study. The PAR methodological approach will be discussed and linked to critical theory. A CIG worked in collaboration with the researcher in cycles of planning, developing and implementing initiatives to enhance utilisation of maternal healthcare services.

2.2 Research paradigm: critical theory

Muhammad, Muhammad, Aijaz, Syeda and Kamal (2011:2083) describe a paradigm as a framework of beliefs, values and methods within which the research takes place. To contextualise and justify the chosen methodology for this study and to acknowledge alternative research methodologies, other paradigms will be discussed briefly and the critical theory paradigm that was adopted for the study will be discussed in detail.

Denzin and Lincoln (2005:192) propose four world views namely, positivism, post-positivism, constructivism and critical theory. Positivists assume that real knowledge is produced by science and that reality exists independent of the social context and can be discovered through objectively designed and applied research (How, 2003:116; Plack, 2005:226). This approach is argued to be reductionist and deterministic in nature by Guba and Lincoln (1994:111). By treating social reality and human action as something that could be studied objectively, Habermas (1974) argues that the positivists are disregarding values, informed opinion, moral judgments and beliefs which are critical in everyday life. On the other hand, post-positivism believes that reality exists independently from the cognitive and perceptive activity of humans hence the act of understanding remains conditioned by the social circumstances and the theoretical framework in which it takes place (Guba & Lincoln, 1994:109). Post-positivists maintain the positivists' stance on objectivity (Plack, 2005:227). In contrast, proponents of constructivism assume that realities are apprehendable in the form of multiple, intangible mental constructions, socially and experientially based, local and specific in nature (Guba & Lincoln, 1994:109).

In search for a paradigm that would address the empirical and interpretive shortfalls of the above paradigms, the critical theory paradigm evolved (McNiff & Whitehead, 2006:41). Proponents of critical theory state that it works to orient towards transformation by changing the status quo (Fui, Khin & Ying, 2011; Dieronitou, 2014:6). It recognises the fluid nature of

reality and how it is formed by social, cultural, political, economic and gender factors but sees these constructions as real for all practical purposes (Ferguson, 1999:40). The critical theory paradigm was suitable for the study because it allowed the researcher to be interactively linked with the CIG members as they critiqued the socio-cultural, economic and operational factors and transformed the status quo.

Denzin and Lincoln (2005:304) acknowledge that it is difficult to define critical theory because many versions of critical theory have emerged, and it is still evolving. Geuss (1981:2) refers to critical theory as a reflective theory which gives agents knowledge inherently productive of enlightenment and emancipation. King (2016:2) broadly defines critical theory as an interdisciplinary range of theories aimed at socio-cultural critique. Patton (2002:131) observes that what makes critical theory 'critical' is that it seeks not just to study and understand society, but rather to critique and change society. In this study, the researcher and the CIG members critiqued the results of the situational analysis conducted in Cycle 1 and developed and implemented initiatives that changed practice and enhanced utilisation of maternal healthcare services. To understand the changes that have happened to critical theory and how they have influenced the researcher's choice of paradigm, the next section will briefly describe the historical developments.

2.2.1 Brief historical development of critical theory

Critical theory emerged from the work of German theorists Max Horkheimer, Theodor Adorno and Herbert Marcuse who were collectively known as the Frankfurt School (Bhattacherjee, 2012:8). Sudersan (1998:254) observes that the Frankfurt theorists were worried about a spurt in authoritarian and totalitarian tendencies and increasing dominance of science over other disciplines. As an alternative, these theorists initially promoted Carl Marx's historical materialism but later drifted away from Marxism, after noticing the failure of Marxism to assist suppressed workers and the people to participate in matters that concerned them (Fui, Khin & Ying, 2011:129; Sudersan, 1998:254; Morrow & Torres, 2002:2).

Jurgen Habermas, a German philosopher, together with other second-generation theorists, developed a strategy for revitalising critical theory. Although Habermas's theory was influenced by the original theory, he differed from other critical theorist proponents in that he believed that, the first generation critical theory's normative foundation is too firmly embedded in Hegel and Marx, despite their effort in trying to reorient Marxism along dialectical and interdisciplinary lines (Horkheimer, Fronam, Lowenthal, Marcuse, Pollock, Adorno, Habermas, Kracauer & Benjamin, 1989:1, Friesen, 2012:28; How, 2003:46).

Habermas argued that Marx failed to distinguish between knowledge gained from causal analysis and knowledge gained from self-reflection and interaction (Agger, 1991:110).

Habermas reconstructed his critical theory from the rubrics of historical materialism into his theory of communicative action and tried to orient it into social theory, indicating a paradigm shift from what he calls a paradigm of consciousness to a paradigm of communication, where people can participate in ideological critique, community building and social movements (Agger, 1991:110). For Sudersan (1998:254) Habermas's theory of communicative action therefore supplemented Marx's paradigm of 'production' with 'language' (McCarthy, 1985:234). Agger (1991:110) observes that Habermas's reconstruction of the critical theory has managed to integrate a wide range of theoretical and empirical insights, from traditional Marxism and psychoanalysis to Parsonian functionalism and speech-act theory. Singh (1999:390) captured the essence of Habermas's critical theory and some of its epistemological assumptions. For example, he points out that Habermas's critical theory is a dialectical synthesis of the empirical-analytic and the historical hermeneutical disciplines. In support, Morrow and Torres (2002:58) observe that Habermas's metatheoretical framework is mainly critical hermeneutics. This approach was appropriate to this study because it allowed the CIG members to engage in dialogue and to critique the socio-cultural values and norms stemming from their historical background and in turn develop initiatives to enhance utilisation of maternal healthcare services.

Three basic philosophical assumptions, namely ontology, epistemology and methodology are concerned with essence, knowledge and method respectively (Guba & Lincoln, 1994:108; Corbetta, 2005:12; Muhammed, Muhammed, Aijaz, Syeda & Kamal, 2008:2082). The following section will discuss how Habermas's epistemological, ontological and methodological assumptions informed this study.

2.2.2 Epistemological assumptions of critical theory

Epistemology is a branch of philosophy that is concerned with the theory of generation of knowledge within a certain context (Chesnay, 2015:62 & Krauss, 2005:758). Morrow and Torres (2002:43) posit that Habermas's epistemological perspectives seek to preserve human sciences without rejecting the importance of causal relations in the genesis of social sciences. Habermas's "communicative action" and guiding "interests of knowledge" assumptions that directed the generation of knowledge in this study will be discussed in the next sections.

(i) Communicative action

Habermas (1984:86) refers to communicative action as an interaction between subjects to reach an understanding about the action. It seeks common understanding and agreement, via a process of rational discourse to reach a mutually acceptable outcome (Young, 2002:188). For that to be possible, all parties are given a fair hearing (Michael & Ramon, 2013:188). Morrow and Torres (2002:49) observe that the basis of Habermas's conception of knowledge is a constructivist theory of truth based on the notion that all knowledge is a result of argumentation. Habermas (1984:18) refers to argumentation as the type of speech in which participants thematise contested validity claims and attempt to vindicate or criticise them through argument. This perspective implies that knowledge is grounded in processes of intersubjectively tested communicative action (Morrow & Torres, 2002:49). Kemmis and McTaggart (2005:577) observe that in an argument, the participants strive for intersubjective agreement and uncoerced consensus on what to do concerning the matter at hand. This assumption supports the notion that in communicative action, participants aim to reach common understanding by coordinating group actions through dialogue and reasoned argument, consensus and action (Bolton, 2014:8). Consensus on action to be taken occurs when all validity claims are raised and accepted (Ritzer, 2008:156).

In this study, the researcher and the CIG members engaged in dialogue during CIG meetings and inquired into the context where decisions are made, including the larger systems of society (social norms, values, institutions) that shape utilisation of maternal healthcare services and the structural and historical conditions framing maternal healthcare services utilisation, as described by Sharan (2009:35). The reflective dialogues allowed the researcher and the CIG members to question and challenge the status quo.

How (2003:141) points that, for dialogue to take place, conditions for communicative action must be ideal to allow unconstrained dialogue. Habermas refers to this condition as an ideal speech situation in which all interlocutors have equal opportunity to engage in the dialogue without restrictions or ideological pressure from the outside and where only the force of better argument holds sway (Morrow & Torres, 2002:48). Habermas acknowledges that in practice, the ideal speech situation may not be possible as there may be a myriad of constraints such as economic, social, cultural and structural constraints that may affect the common life world (How, 2003:165).

Habermas's theory of communicative action was used to diagnose what he refers to as 'disorders of discourse'. In this study, the disorder of discourse was viewed as poor utilisation of maternal healthcare services. The results of the situational analysis showed the factors that led to the discourse. For example, negative attitude of health personnel

towards maternal healthcare services users resulted in poor utilisation of maternal healthcare services. Habermas argues that when the background for consensus is shaken, the participants can either break off communication completely or they can recommence their communicative activity later at a more reflective level (Habermas, 1998:4). The central concern that runs through Habermas's work is the notion of communicative rationality. Ulrich (2008:4) refers to communicative rationality as an idea that there is a rational core in all attempts to achieve mutual understanding. Communicative rationality resulted when the CIG members met and agreed on the development and implementation of the initiatives to enhance utilisation of maternal healthcare services after probing and challenging the publicly presented arguments and evidence of the situational analysis results. In the researcher's view, the PAR opened a communicative space among the CIG members and the researcher to critique the existing maternal healthcare services utilisation.

In this study, knowledge was generated when the researcher and the CIG members critiqued the results of the situational analysis and reached a consensus on initiatives to develop and implement to enhance utilisation of maternal healthcare services. Through open dialogue the researcher and the CIG members reached consensus on how to transform maternal healthcare services utilisation. To create an ideal speech situation, the researcher and CIG members met at a neutral place, where each member was equally entitled to make assertions, raise questions and objections or provide justifications for their positions freely and uncoerced. Ground rules were put in place, for example, maintenance of confidentiality.

In the next section the researcher will discuss how knowledge was generated in this study using the different knowledge interests proposed by Habermas.

(ii) Knowledge interests

Habermas's theory of knowledge establishes a connection between methodological rules and knowledge-constructive interests or cognitive interests (Scot, 2001:2). Habermas posits the notion of knowledge-constitutive interests as a link between scientific methodology and social action. The link is established through three cognitive interests and their corresponding knowledge systems. Firstly, Habermas views knowledge as the empirical-analytical knowledge characterising the natural and generalising sciences (Scot, 2001:2; How, 2003:51 & Ritzer, 2008:152). For Habermas (1971:308), this kind of knowledge is technical, controlling and predictive, where meanings are established only by the rules according to which we apply theories to reality. This type of knowledge can be applied to the environment, societies or people within societies (Ritzer, 2008:152). In this study, technical knowledge was generated when the researcher and the CIG members critiqued

the results of the situational analysis and successfully developed and implemented a maternal health care users' check-list to monitor maternal health personnel attitudes to enhance utilisation of maternal healthcare services

Secondly, Habermas proposes the historical-hermeneutic knowledge system where humanity disciplines are found (Habermas, 1988:3; Ritzer, 2008:152; How, 2003:51). Habermas (1971:309) claims that historical-hermeneutic sciences gain knowledge through understanding meaning and not observations. In Habermas's view, understanding one's past generally helps in understanding what is transpiring now (Habermas, 1971:310). This type of knowledge has practical interest in mutual and self understanding (Ritzer, 2008:152). Practical interests are aspects of knowledge concerned with attaining and extending understanding and consensus in inter-subjective relations to achieve community and mutuality (Habermas, 1971:308 & Mosqueda-Diaz et al., 2014:358). In this study, the CIG members shared their maternal healthcare services utilisation experiences and critiqued them to understand their bearing on the current status quo. The practical knowledge was gained through an understanding of the factors that influenced utilisation of maternal healthcare services and the CIG members' involvement in the development, implementation and evaluation of the initiatives.

Thirdly, Habermas's perspective proposes the critically oriented sciences that focus on reflection and critical discipline (McCarthy, 1985:57). This knowledge system, also referred to as critical-dialectic knowledge system (Ritzer, 2008:152; Scot, 2001:4) combines the practical and technical interests to come up with the emancipatory interest after recognising the limitations of the two (Pusey, 1987:26; Scot, 2001:4). Habermas postulates that an individual's knowledge is increased through critical reflection and self-reflection (Scot, 2001:4). Through reflections, the individual can confront the powers of domination and thus, achieve emancipation. In the CIG, self-knowledge and understanding was generated through participants' individual reflections in their journals which were later shared during meetings. The group meetings provided a platform for in-depth critiques which helped in freeing the individuals from the social and cultural values and norms that affected utilisation of maternal healthcare services.

The following section will discuss the reasons behind the generation of knowledge in Habermas's epistemological propositions.

(iii) Instrumental rationality versus communicative reason.

Wells (1995:48) notes that a communicative or discursive form of reasoning directs individuals to question and negotiate issues, to reach mutual understanding concerning social needs, interests and norms. Ulrich (2009:4) observes that communicative rationality implies that there is a rational core in all attempts to achieve mutual understanding. Morrow and Torres (2002:52) add that realisation of normative reason can only be constructed dialogically and not instrumentally. To support this notion, Wells (1994:48) observes that communicative or discursive reasoning directs an individual to critique the status quo and negotiate with others to reach a mutual understanding. It results when members develop intersubjective agreement after probing and challenging publicly presented arguments and evidence. For Scot (2001:6) instrumental action involves the assessment of alternative choices to control the external reality.

In this study, the results of the situational analysis indicated that there was lack of knowledge among maternal healthcare users on recommended initial ANC booking, complications in pregnancy and the importance of utilising maternal healthcare services. The CIG members developed a context specific birth preparedness information booklet to complement the existing health education efforts. The booklet was developed after wide consultation with community members, healthcare providers and policy makers.

Habermas (1984 cited in Singh, 1999:262) also categorises human approach to knowledge as objective (physical worlds of reality), subjective (mental world of inner experiences) and social (the constructed social world). The objective worldview in maternal healthcare encompasses the scientific and professional knowledge including procedure manuals that assist maternal healthcare providers to provide quality care. The subjective world touches on the personal factors of both the client and the maternal healthcare provider that have a direct impact on maternal outcomes. The factors include personal values, beliefs, attitudes, norms, language, previous experiences with maternal healthcare services and level of education. The constructed social world is the interaction that occurs between the women, their families and maternal healthcare providers. In this study, knowledge was constructed as the CIG members realised that maternal healthcare users need to adhere to recommended WHO guidelines. The CIG members shared and critiqued the indigenous knowledge systems and together, they generated new knowledge which they compiled in a birth preparedness information booklet.

From above discussion it is clear that knowledge can be acquired through scientific and social approaches. As such knowledge can be generated when people come together in a communicative action, critique and reach consensus on the new course of action. The CIG

members generated knowledge through interaction, meetings and ongoing reflections. Self and collective reflections empowered individuals with critical thinking and problem-solving skills. The following discussion will focus on Habermas's nature of reality and how in this study, the truth and reality was defined.

2.2.3 Ontological assumptions of critical theory

Ontology involves the philosophy of reality (Krauss, 2005:758; Sharan, 2009:8). It is concerned with beliefs about what there is to know about the world and whether social reality exists with or without human conceptions and interpretations (Ritchie & Lewis, 2003:11). The ontological stance of Habermas's critical theory is that of critical realism. Judd (2003:34) refers to critical realism as both a philosophy of natural sciences and of human sciences. Critical realists see the social world as a completely stratified open system in which explanations are described in terms of modeling of causal mechanisms and testing models empirically (Lopez & Potter, 2001:19). Lopez and Potter (2001:19) state that human beings are shaped and affected by the social structure and while they reproduce and create it, the social structure also affects them. This assumption is important to this study as the researcher and the CIG members sought to unearth the factors that affected utilisation of maternal healthcare services. They also went further and developed initiatives to enhance utilisation of maternal healthcare services through processes of action and reflection.

The study's ontological perspective is discussed in terms of symbolic interaction. In symbolic interaction, Habermas (1973:18; 2001:63) distinguishes four claims of validity a speaker raises by performing a speech act, namely; a claim to intelligibility, to truth, to justice (normative rightness) and to sincerity. The claims to validity, according to Habermas (1973:18), can only be proven in discourse. The CIG members engaged in cycles of action and reflection to understand the extent of maternal healthcare services utilisation in Mhondoro-Ngezi district and to ascertain whether it makes sense to them and others. The CIG members analysed and critiqued the situational analysis results based on their own knowledge and experiences as the basis to ascertain the truthfulness and sincerity of the results and developed interventions that were context specific. The CIG members developed initiatives which they regarded to be morally right and appropriate in terms of their individual and mutual judgment about what is right, proper and prudent to do under the circumstances in which they find themselves (Kemmis-McTaggart, 2005:577). Engaging the CIG members as co-researchers, allowed the members a share in the system of action and experience, compelling them to a form of communication in which they searched for arguments and justification (Habermas, 1973:18).

2.2.4 Methodological assumptions of critical theory

Methodology refers to the methods that are used to study reality (Punch, 2013: 759). A critical methodological approach to research employs dialogic, dialectical and transformative methods (Shah & Al-Bargi, 2013:260). Dialogic methods combine observation and interviewing with approaches that foster conversation and reflection, while the reflective dialogic approach allows the researcher and the participants to question the status quo and challenge the mechanisms for order maintenance (Cohen & Crabtree, 2006:1). In this study, the researcher conducted focus group discussions with community stakeholders to ascertain the factors that influence utilisation of maternal healthcare services in Mhondoro-Ngezi district. CIG members engaged in reflective dialogue during feedback meetings and reflected individually in their journals. The dialectic nature of critical theory allowed the participants to critique the existing state of maternal healthcare services utilisation and to move back and forth in the development and implementation of initiatives to enhance utilisation of maternal healthcare services.

Habermas (1973:11) defines dialogue as 'a communication in which the understanding subject must invest a part of his subjectivity in order to be able to meet conforming subjects at all the intersubjective level which makes understanding possible'. The researcher and the CIG members engaged in dialogue to critique the results of the situational analysis and to develop and implement initiatives to enhance utilisation of maternal healthcare services.

In this study, PAR, a sub set of action research, was the methodology used as it creates a communicative space in which the CIG participants worked collaboratively as they developed and implemented the initiatives to enhance utilisation of maternal healthcare services. The inclusion of the CIG members in decision making ensured that PAR not only generated a collaborative sense of agency but also a collaborative sense of legitimacy of the decisions the members made and the actions they took together. Collaborative social action in the CIG was justified by the force of better argument.

Critical researchers may adopt qualitative, quantitative or mixed methods (Rashid, 2013:260). In this study, the researcher used multiple methods where quantitative and qualitative data were collected sequentially. Descriptive and inferential statistics, focus group discussions, CIG meetings and reflective journals were used to collect and generate data. The self and collective reflections were imperative as they assisted the researcher and the CIG members in understanding their experiences. The critical methods enabled realities to be critically examined from a historical, cultural and operational stance (Scotland, 2012:14).

2.2.5 Rationale for using critical theory

Real life behaviour is determined by a variety of psychological, physiological and cultural factors (Greenwood & Levin 2007:14). Habermas's critical theory was chosen for this study because of its capacity to interrogate the socio-cultural norms and values that influence utilisation of maternal healthcare services. As maternal health care users are born in a society where cultural values and beliefs are rooted, their decisions in utilisation of maternal healthcare services are based on those beliefs which the researcher and the CIG members unearthed through a process of action and reflection.

Critical theory further attempts to criticise and change the social reality hence it has a practical intervention (Roderick, 1986:7). This practical approach allowed the researcher to interact with the community, engage them in dialogue and develop a partnership in the development of the initiatives to enhance utilisation of maternal healthcare services. Maternal healthcare services utilisation was examined from a cultural, religious, historical and economic stance. A dialogic relationship of equality between the researcher and the CIG members was established. By engaging in dialogue where arguments were initiated to reach consensus, both the CIG members and the researcher were empowered with negotiation skills. In this way, the research attempted to assist in developing critical thought and practice and at the same time improved maternal health seeking behaviours.

2.2.6 Critique of critical theory

Critical theory in general has been criticised for lacking clarity in terms of guidelines and roadmaps to achieve the desired goal of liberating and empowering people (Shah & Al-Bargi, 2013:261). In this study, the researcher and CIG members adhered to the PAR processes and timelines were put in place to ensure the set outcomes were achieved. A major critique to Habermas's theory has been that it leans heavily towards European historical perspective despite its claim to universalism (Gunaratne, 2006:97). In response, Habermas developed the theory of communicative action, which can be used in any context.

Another criticism to Habermas's critical theory is that it is difficult to understand as it is abstract and is loaded in text (Singh, 1999:390; How, 2003:44). Habermas defends himself on this aspect by claiming that one should be abstract to unveil what is universal to the social world. The researcher read widely to understand Habermas's perspectives and only used aspects that apply to the study. Having outlined the above shortfalls, the immense strength of Habermas's theory in transforming the phenomena under study cannot be denied.

In conclusion, although Habermas's critical theory has some shortfalls, the benefits of using the theory in this study, outweighed the shortfalls. In the next section, the researcher will discuss the research design and approach that were used to collect, analyse and interpret the data.

2.3 Research design

Research design refers to the overall structure or plan of the research and it guides the specific procedures that are involved in data collection, data analysis and the final write up of the research (Bowling, 2014:166 & Creswell, 2012:20). In this study, a PAR design, a sub-set of action research design, was used to inform the study (Creswell, 2012:579, McDonald, 2012:35). The rational for choosing PAR is because it allowed the researcher to engage in collaborative research and action with community members that led to useful interventions to the benefit of the community members (McIntyre, 2008:1). The PAR design will be discussed below under the following subheadings; PAR approaches, history, process and the link between critical theory and PAR design.

2.3.1 Participatory action research approaches

Literature interchangeably use the term PAR and collaborative research (Koch & Kralik, 2006:13). Castellanet and Jordon (2002:18) define participation as the involvement of the local people in the research process. A participatory world view places people and communities as part of their world and co-creating that world (Reason & Bradbury, 2001:7). Powers and Allaman (2012:1) define PAR as a 'process through which people investigate meaningful social topics, participate in research to understand the root causes of problems that directly impact them and then act to influence policies. This is in line with MacDonald's orientation (2012:35) that PAR involves a conscious action to change in which the individual or community develop a collaborative and reflexive awareness to change. The evidence produced in the study was implemented in the study context. The researcher chose PAR because of its ability to encourage community participation and involvement from the onset from exploring current maternal healthcare services utilisation, planning, developing, implementing, critically examining and reflecting on the developed initiative. PAR bridged the gap between evidence and practice as suggested by Bhattacher (2012: 40) and Mash (2014:1).

Four types of participation have been highlighted by Biggs (quoted in Cornwall & Jewkes, 1995:1669), namely contractual (people are contracted to take part in inquiries), consultative (people are consulted by researchers before interventions are made), collaborative (researchers and the local people work on projects designed, initiated and managed by the researchers) and collegiate (researchers and local people work together

as colleagues with different skills to offer). This study adopted a collaborative and collegiate approach recognising that local people's knowledge is valuable and the community stakeholders can analyse their own situation and design their own solutions.

Mash (2013:2) identified three broad traditions to PAR, namely empowering, organisational and professional. Empowering PAR involves working with people to liberate, emancipate and empower them. Organisational PAR involves working in the corporate context to collaboratively solve organisational problems while professional PAR works with professionals who want to change their practice. This research falls under empowering PAR whereby the researcher and the CIG members worked collaboratively to develop initiatives that enhance utilisation of maternal healthcare services. The researcher and the CIG members were empowered with research skills to critique the status quo and act.

By involving the local people in the development of the initiatives, the participants were empowered to intervene in a deliberate way to bring about change (Burns, 2010:2). The CIG members participated in the research through critiquing the results of the situational analysis, development, implementation and evaluation of the initiatives. Through acting (development and implementation of initiatives), practical knowledge was generated.

Greenwood and Levin (2007:7) comment that PAR is a powerful approach in generating new research knowledge. In this study, new knowledge was generated through development of initiatives to enhance utilisation of maternal healthcare services.

2.3.2 History of participatory action research

There are several interpretations of the origin of PAR in literature, but the common thread is that it emerged from action research to address issues and concerns with marginalised groups and to restore their ability to create knowledge and practice in their own interests (Reason & McArdle, 2004:4). Kurt Lewin coined the term 'action research' in the 1940s to describe a research process in which the developed theory would be tested by practical interventions and action (Kindon, Pain & Kesby, 2000:9). Action research was originally based on the iterative cycle of reflecting on the current situation, then carry out a change experiment and reflect on the change cycle (Marks & Yardley, 2004:115). This is now often referred to as the iterative cycle of action and reflection or spiral science (Kindon, Pain & Kesby, 2000:9).

In the latter 20th century, PAR emerged when Paulo Freire (1970) carried out a community-based research with participants to support their participation in knowledge production and social transformation (Kindon, Pain & Kesby, 2000:10). This aspect resonates with the researcher's approach in this study where initiatives to enhance utilisation of maternal

health care services were developed in collaboration with community stakeholders. The researcher used PAR to explore utilisation of maternal healthcare services by engaging community stakeholders in a collaborative cycle of action and reflection in developing initiatives to enhance utilisation of maternal healthcare services. The approach is similar to that of Reason (1998:3), who believed in active participation of the researcher and the participants in the development of initiatives, resulting in the construction of knowledge and promotion of critical awareness that led to individual, collective and social change.

The above discussion showed that the history of PAR which was based on collaboration has had major implications to research and education.

2.3.3 Process of participatory action research

Participatory action reseacrh involves a cyclic, rather than linear process of planning for a change, putting the plan into action, observing what happened and reformulating the plan considering new developments and so on (Khan & Chovanec, 2010:35). Kemmis, McTaggart and Nixon (2014:18) refer to the whole process as self reflection cycles. The cycles proceed in spiral of cycles each composed of a circle of planning, acting, observing, reflecting and drawing up of a revised plan (Kemmis & McTaggart, 1988:11). The process is not simple and fixed but more fluid and responsive as concerns may shift as actions, observations and reflections deepen one's understanding of the situation (Winter & Munn-Giddings, 2001:10). The stages also overlap as the initial plans quickly become obsolete in the light of learning from experience (Kemmis, McTaggart & Nixon, 2014:18). Both the researcher and the participants remain partners throughout the research process. The most common methods used to collect data in PAR are dialogue, storytelling, participatory diagramming and mapping, drama and role play (Kindon, Pain & Kesby, 2000:16, 72).

Throughout the study, preliminary findings were shared with the participants to allow discussions to inform the next stage as indicated by Green and Thorogood (2004:38). This collective investigation and analysis of the underlying socio-cultural, economics, values and norms that influence utilisation of maternal healthcare resulted in a collective action to address poor utilisation of maternal healthcare services.

PAR ensures a consensual, democratic and participatory approach to a study (Berg, 2001:180), which was also the case in this study. The role of the researcher was to empower the community with necessary research skills to critique the status quo and develop initiatives that were context specific.

The design's main attribute of working with, for and by the people instead of undertaking a research for them (Pope & Mays, 2006:121) and the ability to feedback the research

findings into the social context in which they were generated (Ritchie & Lewis, 2003:9), attracted the researcher. Involvement of participants is critical as it ensures constructs are congruent with their life experiences and as such, enhances the rigour of the inquiry (Koch & Kralik, 2006:29). The design is also in line with the current landscape where there is a paradigm shift in which health research is moving from making decisions for clients towards working with clients in identifying their concerns and formulating their own strategies to address those concerns (Koch & Kralik, 2006:11). In this study, the CIG members identified knowledge gaps in health information and developed a birth preparedness information booklet to address the gap.

The above discussion highlighted the process that was undertaken by the researcher and the CIG participants as they worked collaboratively in relation to critiquing the results of the situational analysis, develop and implement initiatives to enhance utilisation of maternal healthcare services.

2.4 Research method

Research methods refer to the specific practices and techniques used to collect, process and analyze the data (Bowling, 2014:166). Dawson (2007:15) defines research methodology as the philosophy or general principles that guide the research. To develop initiatives to enhance utilisation of maternal healthcare services, the researcher used multiple methods. Multiple method research combines data gathering and analysing techniques from different methodological approaches (Seawright, 2013:10) and draws expertise from alternative disciplines appropriate in answering the research questions (Ritchie & Lewis, 2003:15). In this study, the researcher collected quantitative data first, followed by qualitative data. Qualitative data was used to further explore the quantitative data as described by Green and Thorogood (2004:48) in explaining the utilisation of maternal healthcare services. The benefit of harnessing qualitative and quantitative data capturing methods in this research was that, each provided distinct evidence and when they were used together they provided powerful insight that informed and illuminated practice (Ritchie & Lewis, 2003:38). A cooperative inquiry was used to develop initiatives to enhance utilisation of maternal healthcare services. In this section, the cooperative inquiry, the method used to undertake collaborative research with community stakeholders, will be discussed.

2.4.1 Cooperative inquiry method

From the family of PAR, the researcher chose the cooperative inquiry method to explore and develop initiatives to enhance utilisation of maternal health care services. Armstrong and Banks (2011:15) and Oates (2002:27) note that in cooperative inquiry the participants

engage in a democratic dialogue as co-researchers in designing, implementing and drawing conclusions from the research to effect positive change. In this study, the cooperative inquiry went through three cycles of action and reflection as described by Reason (1999:8) and discussed in the following section.

Two inquiry cultures in cooperative inquiry are identified in literature as Apollonian and Dionysian inquiries (Reason & Bradbury, 2001:183; Reason, 1999:25; Oates, 2002:32). Reason (1999:25) observes that 'the Apollonian inquiry takes a more rational, linear, systematic, controlling and explicit approach to the process of cycling between reflection and action' while the Dionysian inquiry 'takes a more expressive, spiraling and diffusing, impromptu and tacit approach to the interplay between making sense and action'. In each reflection phase, group members share improvisatory, imaginative ways of making sense of what went on in the last action phase' (Heron & Reason,1998: 12). This study adopted the Dionysian inquiry as it allowed flexibility. The researcher and co-researchers moved back and forth between action and reflection.

The researcher chose cooperative inquiry as the most appropriate method owing to its ability to engage the researcher in meaningful dialogue with community stakeholders and allowing them to direct the research and subsequent intervention, which in this study was the development of the initiatives to enhance utilization of maternal healthcare services. This method gave the rural community in the study the capacity to generate new knowledge, while the researcher became immersed subjectively in the study as discussed by Llyod and Carson (2005:190). Professional and local knowledge were merged in a collaborative process (Armstrong & Banks, 2011:9), integrating values, norms and beliefs that are indigenous to the community.

The drawback of cooperative inquiry is the lack of a robust theory of action and of the exercise of power (Reason, 1998:30). To address these drawbacks, the researcher and the CIG members read other CIG projects for guidance, the group leader was chosen by the members themselves and there was mutual respect among members. To address the issues that were revealed in the situational analysis, a CIG was formed with community stakeholders. The next section will discuss the cycles undertaken by the CIG members as they developed, implemented, observed and reflected on the outcome.

2.4.2 The cooperative inquiry group (CIG)

A group of inquirers, called a CIG, undertook cycles of action and reflection exploring utilisation of maternal healthcare services and developed initiatives to enhance utilisation of maternal healthcare services. The CIG is a form of PAR and falls within an emancipatory-critical research paradigm (Mash & Meulenberg-Buskens, 2001:1108). In this study, a CIG

was externally initiated by the researcher and consisted of maternal health care providers, community members and postnatal women. The researcher invited these community stakeholders to participate in the CIG based on the findings from Cycle 1, the situation analysis and their ability to contribute towards resolving the issues that emerged from the analysis. Because the cooperative inquiry is a journey with no absolute end (Mesh & Meulenberg, 2001:1109), the CIG members and the researcher continuously reviewed their progress. The CIG went through inquiry cycles of planning, action, observing and reflecting as suggested by Mash and Meulenberg-Buskens (2001:1108). The activities of the CIG members will be discussed in detail in chapter 4.

2.4.3 Explanation of the cycles

The following section will highlight how quantitative and qualitative data was collected in this study in the different cycles.

Data was collected from August 2016 to August 2017 using three PAR cycles. The spiral of research action proposed by Zuber-Skerrit (2001:22) guided the study (see figure 1).

2.4.3.1 Cycle 1: Situation analysis to obtain baseline data on the utilisation of maternal healthcare services.

The focus was to obtain baseline data on maternal morbidity and mortality and maternal healthcare utilisation from the clinics and hospital data capturing sheet, as well as from reports on maternal mortality meetings. This cycle therefore had two objectives as discussed in the following section.

Objective 1.1: To describe baseline data on maternal morbidity and mortality rates and maternal healthcare services utilisation in Mhondoro-Ngezi district in Mashonaland West Province.

Plan and act: The researcher planned for and obtained baseline data regarding the utilisation of maternal healthcare services which included maternal morbidity and mortality rates.

Observe and reflect: The researcher analysed, reflected on and interpreted the above data and utilised it as a basis for the next cycle.

(a) Unit of analysis

The unit of analysis refers to the person, collective or objects that is the target of the investigation. Identifying the unit of analysis helps in shaping the type of data that will be collected and where it will be collected from (Bhattacherjee, 2012:9-10). The unit of analysis

for obtaining baseline data on maternal morbidity and mortality and available resources were attendance registers, maternal mortality records and documentation, including incident reports and hospital statistics stating causes of maternal deaths and transfers done to provincial and central hospitals. The number of ante-natal bookings, deliveries and postnatal attendances was obtained from hospital registers and management information database to describe maternal healthcare utilisation in Mhondoro-Ngezi district. The units of analysis for available resources were inventory books, asset records and staff registers. The following section will describe how data was collected.

(b) Data collection and data generation

Data was collected using a data capturing sheet developed by the researcher (see Annexure E). The data capturing sheet was divided into four sections. Section A captured data on maternal mortality statistics, nature of complications and number of obstetrics complications transferred. Patients who were transferred to the central hospital were followed up to ascertain the outcome. Ethical approval was sought from Harare Central Hospital ethical committee (Annexure D). Section B captured data on maternal healthcare utilisation statistics during the antenatal, delivery and postnatal period from January to December 2015. The areas that were covered in Section B included the gestational age at booking, number of antenatal visits, total number of deliveries at the health care facility and total number of postnatal attendances at the health centre at 3 days, 7 days and 6 weeks. The data was compiled from the existing information from the hospital data base. Section C recorded maternal audit meetings conducted in the district, number of cases discussed, number of professionals who attended and the outcome. There were no maternal audit meetings recordings during the period of the study. Section D recorded available resources such as health personnel, facilities and other technicalities.

(c) Data analysis

The Strata software programme version 14.0 was used to analyse data in consultation with the statistician. Data was analysed using descriptive and inferential statistics. Inferential statistics are statistical procedures that are used to reach conclusions about associations between variables (Bhattacherjee, 2012:129; Creswell, 2012:182) and were used in this study to draw conclusions about the population. Descriptive analysis refers to statistically describing, aggregating and presenting the constructs (Bhattacherjee, 2012:119). They indicate the general tendencies in the data (mean, mode, median), the spread of scores (variance, standard deviation and range) or a comparison of how one score relates to all others (z scores, percentile rank) (Creswell, 2013:182). To summarise the statistical results, tables and figures were used. The findings are discussed in Chapter 3.

Objective 1.2: To explore and describe maternal healthcare services utilisation in Mhondoro-Ngezi district in Mashonaland West Province.

Plan and act: The researcher planned for and obtained baseline data regarding the utilisation of maternal healthcare services, including women's preferred maternal care provider during pregnancy, delivery and after delivery and reasons for choosing the preferred maternal healthcare provider.

Observe and reflect: The researcher analysed, reflected on and interpreted the above data and utilised it as a basis for the next cycle.

(a) Population

A population is a group of individuals who have the same characteristics (Creswell, 2012:42). A target population is a group of individuals with some common defining characteristics that the researcher can identify and study (Creswell, 2012:142). The study targeted population for exploring maternal healthcare utilisation in Mhondoro-Ngezi were maternal healthcare providers (midwives, traditional birth attendants and village health workers), community members (men, chiefs, councilors and politicians) and post-natal women. Postnatal women were included in the study with the believe that people who are actually living in the situation that is being researched have individual inside knowledge, which makes them more qualified to research it as observed by Marks and Yardley (2004:115). Village health workers are voluntary members of the community selected, trained and work in the communities they reside (WHO, 2007:3). Hence the researcher included them in the study in order for them to share their experiences and perceptions regarding maternal healthcare services utilisation. Although the researcher had requested the presence of traditional birth attendants, none were available for the discussions. This could be because the traditional birth attendants are no longer allowed to operate in Zimbabwe and some birth attendants belong to religious groups that do not allow them to associate with health institutions.

The rationale for including midwives in the study was to ensure they confront and critique practice issues and address them collaboratively with other community stakeholders thereby bridging the gap between research and practice. Because community participation has gained momentum as a new approach in addressing health issues affecting the communities, the researcher included the community members in the study to ensure their views were incorporated in the development and implementation of the initiatives to enhance utilisation of maternal healthcare services.

(b) Sampling methods

Multi-stage sampling was used to choose the district with the highest maternal mortality in Mashonaland West. According to ZIMSTAT (2012:129), Mhondoro–Ngezi has the highest maternal mortality in the province, recording a maternal mortality ratio of 661 per 100 000 and served as the study context. Mhondoro-Ngezi district has one district hospital, namely St. Michaels Mission Hospital. The study was conducted at St. Michaels Mission Hospital. Focus group discussions with maternal healthcare providers and postnatal women were conducted at Murambwa Clinic in cycle 1. The rationale for including a clinic was that, most maternal cases are attended to at a primary level before they are transferred to secondary level and it was difficult for the researcher to recruit enough postnatal women for a focus group discussion at St. Michael Mission Hospital.

Maternal healthcare providers, community members and post-natal women were recruited at St. Michaels Hospital and Murambwa Clinic respectively, during weekdays using the purposive sampling method. Recruitment methods included talks by healthcare providers and through word of mouth. Purposive sampling method is a non-probability sampling method in which units are deliberately selected to reflect features of or groups within the sampled population (Ritchie & Lewis, 2003:78). A heterogeneous sample was chosen for community members consisting of male and female stakeholders. The rationale for choosing a purposive sampling method was to intentionally select participants who the researcher deemed had the relevant information (Creswell, 2012:206) on maternal healthcare services utilisation. The inclusion criteria for the sample were:

- ➢Maternal healthcare providers (midwives, traditional birth attendants and village health workers) working and residing in Mhondoro-Ngezi district during the time of the study;
- ➢Community members (men, women, councilors and politicians);
- ➢Postnatal women aged 18 years and above.

(c) Data collection and generation

In this cycle, three focus group discussions were undertaken with maternal healthcare providers, community members and postnatal women (see Annexure B and C). A different interview guide was used during the discussions with maternal healthcare providers and post-natal women from the one used for community members (see Annexure B and C respectively). The community interview guide elicited community views on maternal healthcare services utilisation.

- **Focus group discussions**

In a focus group discussion, a group of people with similar characteristics specific for the research are brought together to discuss a specific research issue to enhance understanding and to get a group opinion mostly focusing on the interaction between the participants while the researcher takes a less active role in directing the discussion (Bowling, 2014:410, Green & Thorogood, 2004:111; Barbour, 2013:19). As the participants interacted during the discussions, the researcher had an opportunity to listen to the participants' experiences (Silverman, 2004:181). Because group discussions allow participants to hear what others are saying, they provided an opportunity for the participants to reflect and deepened the participants' insights into their own experiences, attitudes and behaviours (Ritchie & Lionel, 2003:37) regarding maternal healthcare services utilisation.

The value of focus group discussion includes its potential for producing considerable information in a short space of time and ability to allow people to be collectively interviewed in one place and at the same time exploring how ideas are shaped, generated or moderated through conversation with others (Green & Thorogood, 2004:111; Willig, 2013:122; Ellis, 2010:51).

Experiences of maternal healthcare services were expressed by the participants in their own words using the indigenous language, Shona, in a dialogue with the researcher. Three focus group discussions in total were conducted in this cycle. Each group consisted of six to ten participants and lasted between 60 to 90 minutes. All discussions were audio-recorded after seeking permission from the participants. The disadvantage of audio recording is that it does not include non-verbal interaction and it is difficult to identify the speaker and important contextual details which influenced the speaker's utterances (Burns, 1999:96). To address this shortfall, the researcher made use of field notes. A discussion of field notes follows later in this section.

It was difficult to recruit maternal healthcare providers and postnatal women for the focus group discussions at St. Michaels' Mission Hospital. To address this challenge, the researcher conducted focus group discussions with postnatal women at Murambwa clinic, which was the nearest clinic to St. Michaels Mission Hospital after consultation with the supervisors. Since the ethical clearance from the Ministry of Health and Child Care gave the researcher permission to access all the health facilities in the whole district, there was no need to seek another ethical clearance. Traditional birth attendants could not be mobilised to attend the focus group discussions. The plausible reason for failure to mobilise

traditional birth attendants could be because they did not want to be known since in Zimbabwe there is a policy that bans their practices.

Before conducting the focus group discusssions, the researcher began the formal session with a personal introduction, outlining the research topic and purpose of the study. The issues of confidentiality were stressed. Written consent was obtained from all the participants before the discussions. All the discussions were audio recorded after seeking permission from the participants. Two scribes who were trained and briefed by the researcher on the purpose of the study complimented the audio recording by writing field notes. To ensure anonymity, the participants were identified by numbers which they picked from a list of numbers that the researcher provided. The numbering for participants used in the tables on findings (Chapters 3 and 5) are the same numbers that were allocated to participants. The participants are indicated as maternal healthcare provider (MHCP), postnatal woman (PNW) or community member (CM). The participants were reassured that every response mattered; there was no right or wrong answer, but everyone's contribution was important to address the subject matter. Each participant was asked to call out their numbers each time they gave a response so that the number could be captured.

A focus group guide (Annexure B) was used during the discussions. A focus group guide is a set of specific questions organised thematically and used to facilitate a focus group (Ritchie & Lewis, 2003:133). The guide ensured key issues were explored systematically, but also allowed flexibility when some probing was needed (Ritchie & Lewis, 2003:136).

The issues that were discussed in the focus groups with maternal healthcare providers and postnatal women included:

- ➢ Women's preferred maternal healthcare provider during pregnancy, delivery and postnatal period;
- ➢ the reasons for choosing the preferred maternal healthcare provider;
- ➢ what can be done to influence women to utilise maternal healthcare services;
- ➢ what initiatives can be developed to enhance utilisation of maternal healthcare services.

The issues for focus group discussions with the community members included:

- ➢ Beliefs and practices that women of child bearing age are expected to conform to;
- ➢ barriers to utilisation of maternal healthcare services.

Two research assistants took field notes during the focus group discussions. Of the two research assistants that volunteered to assist, one held a diploma in midwifery (took notes

during focus group discussions with community members) and the other one was a PhD student (took notes during a focus group discussion with maternal healthcare providers and postnatal women). The researcher assistants were orientated to the research a day before the field visit.

At the end of each focus group discussion session, there was debriefing between the researcher and the research assistant to address observations made and any challenges faced. The recorded messages were saved on external drives.

- **Field notes**

Field notes are notes taken during field work or when doing an interview (Yin, 2011:166). Burns (1999:87) further states, 'field notes are descriptions and accounts of events in the research context which are written in a relatively factual and objective way'. Israel, Eng, Schulz and Parker (2005:423) categorise field notes into observational, methodological, theoretical and personal notes. The same authors explain that i) observational notes are recordings about the participants, place or the environment, anything that cannot be captured by the tape recorder; ii) methodological notes comment about the guide, changes in order of questions, difficulties encountered while asking certain questions, length of interview or any interruptions that may have occurred; iii) theoretical notes are about the objective of the interview, comments on any new themes emerging from the interview and finally iv) personal notes are notes on how the interviewer felt during the interview.

In this study, field notes were captured during each focus group discussions to capture verbatim data in real time. Observations noted during the data collection were noted on the focus group discussions guide and the researcher's reflective journal. The field notes were reviewed every night by the researcher after data collection while events were still remembered, to help verify the data being collected and to give the researcher the opportunity for evaluating data collection methods as suggested by Yin (2011:168).

(e) Data analysis

Data analysis is a process of making sense of collected data (Sharma, 2009:175). The focus group discussions were audio recorded, transcribed verbatim and translated from Shona (the vernacular language) into English and back to Shona by the researcher to ensure the translation did not distort the meanings. Tesch's (1990) method of content analysis was used to identify the themes as suggested by Creswell (2012:237) as follows:

Step 1: To prepare and organise the data for analysis the recordings were transcribed verbatim to allow the researcher to read through the transcript many times inorder to identify important issues raised.

Step 2: The data was explored and coded.

Step 3: A detailed analysis with a coding process was initiated using the following steps:

1. All the transcriptions were read carefully to get a sense of the whole data. This involved converting audiotape recording and field notes into text data.
2. Interesting and short interviews were picked out to get the underlying meaning. Thoughts were written in the margin.
3. Similar topics were clustered into columns.
4. Topics were abbreviated as codes.
5. Categories were then formed from the most descriptive wording.
6. A final decision was made on the abbreviation of each category and the codes were arranged alphabetically.
7. Data material belonging to each category was assembled in one place and a preliminary analysis was performed.
8. After the preliminary analysis the existing data was recorded.

Step 4: To generate a description of the setting and themes for analysis, the coding process was used.

Step 5: This process helped in the description of how sub-themes and themes would be represented in the qualitative narrative.

Step 6: After the themes were described the findings were interpreted.

The researcher read the transcripts repeatedly and words with similar meanings were grouped into categories. Similar categories were grouped into themes and sub-themes which are presented as findings. The findings contain verbatim quotations from participants without editing the grammar to avoid losing meaning. Expressions in vernacular language are presented in parentheses and code numbers are used in the quotes to maintain anonymity of the participants. The findings of the focus group discussions are discussed in chapters 3 and 5.

2.4.3.2 Cycle 2: Develop and implement initiatives to enhance utilisation of maternal healthcare services.

In this cycle, the CIG was formed with maternal healthcare providers, community members and postnatal women. The CIG met with the researcher and considered the findings from the baseline data, developed, implemented and reflected on the initiatives.

Objective 2.1: To develop and implement initiatives to enhance utilisation of maternal healthcare services.

Plan and act: The researcher assembled a CIG and used the baseline data gathered from cycle 1 in co-operation with the CIG, to develop and implement initiatives for enhancing utilisation of maternal healthcare services.

Observe and reflect: The researcher and the CIG members monitored and reflected on the implemented developed initiatives.

(a) Population

The CIG was formed with stakeholders (maternal healthcare providers, community members and postnatal women) to carry out the research in collaboration with the researcher. The researcher invited community stakeholders to participate in the CIG based on the findings from Cycle 1 and their ability to contribute towards resolving the issues that emerged from the baseline data. The group was formed with the notion that these stakeholders are co-researchers that possess expert local knowledge derived from their everyday interaction with the community (Rodriguez & Brown, 2009:23; Beerger & Peerson, 2009:119). Engaging these community stakeholders in decision making encouraged community ownership of the research from the onset. The researcher acted as a facilitator while most of the decisions were made by the CIG members. The CIG members were trained on the PAR process as described by Mash and Meulenberg (2001:1112) and on how to reflect in order to develop reflectivity as indicated by Mash (2014:3). Each member kept a personal journal (note book) for recording what they did, what happened, thoughts, feelings and reactions as suggested by Mash (2014:3). Group norms, such as channels of communication, respect for others, trust and confidentiality were agreed upon.

The researcher sought the CIG's engagement in:

- agreeing on a constitution for collaboration;
- defining roles and responsibilities of each member of the group;
- engaging in the cycles of action and reflection to generate change and learning;

- having regular meetings to share reflections and giving feedback on the progress of the research process; and
- dealing with and reviewing ethical issues.

The researcher sought to build a collaborative relationship based on mutual trust and respect resulting in key themes being shared, contested, discussed, refined, recorded and constructed into initiatives to enhance utilisation of maternal healthcare services. The researcher and the CIG members planned for the implementation of the initiatives. The action plan for implementing the initiatives was discussed and agreed on by the CIG and the maternal healthcare providers involved with the study.

This section outlined the cycle of steps in line with PAR process of planning for a change in utilisation of maternal healthcare services by undertaking a situational analysis, acting and observing the change and consequences of the change (developed and implemented the initiatives) reflecting on these consequences, and then replanning.

(b) Sampling Method

Purposive method of sampling was used to recruit the CIG members. The size of the CIG was determined by the number of participants who were willing to participate. It was difficult to recruit the CIG members, but those who took part, showed willingness to participate without payment. Initially they were ten participants, but as the research progressed, one dropped out and the final number was nine (one midwife, three community members, two postnatal women and three village health workers). The inclusion criteria for the CIG were:

- maternal healthcare providers (midwives, traditional birth attendants and village health workers) working and residing in Mhondoro-Ngezi district during the time of the study;
- community members (men, women, councilors and politicians);
- postnatal women aged 18 years and above.

(c) Data generation

Data was generated from field notes, CIG members' reflective journals and transcribed audio recordings from the minutes of the CIG members' meetings. Journals were used by all CIG members and the researcher to record their thoughts, observations, personal reflections, perceptions and recommendations about how things could have been made differently. The journal notes, transcriptions and minutes of the meetings were collected, typed and analysed after each meeting. The generated data was fed back into the next meeting. The frequency of the meetings was agreed upon by the CIG members; initially

they were conducted weekly during the development of the initiatives and fortnightly during the implementation period. The detailed schedule of meetings will be discussed in Chapter 4.

- **Journal**

A journal is an alternative to field notes and provide continuing accounts of perceptions and thought processes, personal reflections and interpretations (Burns, 1999:88). McKernan (1996:84-85) reports three types of journals. The first one is the intimate journal which consists of personal notes, a log of events rich in personal sentiments and even confessions. The second one is a memoir and is impersonal while the third one is a log which shows a running record of transactions and events. In this study, the researcher and CIG members made use of the intimate journal. The journal reflections are discussed in Chapter 5.

- **Reflexivity**

Reflexivity is the recognition that the researcher is part of the process of producing the data and their meanings, and a conscious reflection of that process (Green & Thorogood, 2004:194). This is important in the cycle of plan, act, observe and reflect of PAR. Researchers' reflections on their actions and behaviours in the field, their impressions, irritations and feelings became data on their own, forming part of the research interpretations (Flick, 2009:16). Initiatives that can be adopted to ensure reflexivity include being explicit about the steps taken in data production and analysis, theoretical openness, awareness of the wider social context and awareness of the social setting of the research itself (Green & Thorogood, 2004:195). The details of the planning, implementation and evaluation of the initiatives in this research are described in detail in Chapter 4. Both the researcher and the CIG members recorded their reflections in journals and these were fed back into the study during feedback meetings, where collective reflections were done, and plan of action was initiated.

(d) Data analysis

Data analysis was done concurrently with data generation to ensure a feedback loop to the participants. As Koch and Kralik (2006:42) point out, 'the feedback loop with participants of emerging data enhances the rigour of analysis and creates the opportunity to build up participants understandings collaboratively'. The CIG members participated in analysing the returns from the evaluation of the check-lists that were used to address health personnel

attitudes. The hospital authorities were also given feedback on the results of the evaluation of the check-lists.

2.4.3.3 Cycle 3: Evaluate the impact of the implemented initiatives

The focus of Cycle 3 was the same as Cycle 1 in which the same objectives used in Cycle 1 were used to compare data between the two cycles to confirm if utilisation of maternal healthcare services had been enhanced after the implementation of the initiatives. The evaluation phase reflected on the collaborative process that aimed to enhance maternal healthcare services utilisation. The findings of Cycle 3 will be discussed in Chapter 5.

Objective 3.1: To compare maternal morbidity and mortality rates with baseline data after implementation of initiatives to enhance utilisation of maternal healthcare services.

Plan and act: The researcher obtained data from the hospital information system and compared the effect of the implemented initiatives on utilisation of maternal healthcare services.

Observe and reflect- The researcher and the CIG members compared the findings with the baseline data and CIG members' and researcher's reflections to confirm if the utilisation of maternal healthcare services has been enhanced.

(a) Unit of analysis

The unit of analysis was the same as those used for objective 1.1 which were: maternal mortality records and documentation, including incident reports and statistics, causes of maternal deaths and transfers done. The number of antenatal bookings, deliveries and postnatal attendances were obtained from hospital registers to ascertain maternal healthcare utilisation in Mhondoro-Ngezi district two months after implementation of the initiatives.

The initiatives were mostly implemented at St Michaels Mission Hospital. However, since the birth preparedness information booklet and posters filtered into the district clinics, the whole district findings are also presented to ascertain the trend of services utilisation during the period of the implementation of the developed initiatives. The evaluation was undertaken during and a month after implementation of the initiatives to capture the views and perceptions of the community stakeholders while the impact of the implemented changes was still fresh in their minds.

(b) Data collection and data generation

The same data capturing sheet (Annexure F) used for objective 1.1 was used for this objective to compare, evaluate and reflect on the difference and this was done over a month.

The data that was used for comparison was drawn from June and July 2015 returns and June and July 2017. The same data capturing sheet (Annexure E) used for objective 1.1 was used for this objective to compare, evaluate and reflect on the findings.

(c) Data analysis

Statistical methods for association between groups was Chi-square as described by Bhattacherjee (2012:122) and Polit and Beck (2003:493) and for comparison between groups, a test for proportion was used as described by Polit and Beck (2012:421). The t-test that was initially proposed was not used because the available data was not continuous, and the sample size was too small, a test for proportion, in which the Z score was recorded together with the p value (p), was used where,

The null hypothesis (H_0) = There is no difference between the proportions in 2015 and 2017

The alternative hypothesis (H_a) = There is a difference in the proportions in 2015 and 2017.

Ferreira and Patiro (2015:485) define the p value as the probability of observing the given value of the test statistics or greater, under the null hypothesis (of no statistical difference between groups). The null hypothesis in this study was set at 0.05. This means that when no difference exists, such an extreme value for the test statistic was expected less than 5% of the time. Ferreira and Patiro (2015:485) comment that, a small sample size may be under powered to detect the difference.

The rational for not using the proposed t-test was twofold. The first reason was that the test could not be used because the existing data obtained from hospital records were count data. To use the t-test, one needs continuous data (example weight, height and so on) and a standard deviation and mean. Since the count data in the study were small, at times 1s and zeros, after analysis a standard deviation of zero was obtained resulting in no results. The second reason was the small sample size, where for example, only 2 first ANC visits in less than 16 weeks were reported for all age groups for the whole month of June 2015.

The chi-square statistic was used to test the hypothesis of no association between utilisation of maternal healthcare services in June and July 2015 before initiatives were

developed and implemented and same period in 2017 after implementation of the developed initiatives. A large value of chi-square statistic means a small probability of occurring by chance alone ($p < 0.05$) and the researcher concluded that association exists between the developed initiatives and utilisation of maternal healthcare services. Small value of chi-square statistic means that there was a large probability of occurring by chance alone ($p > 0.05$) and the reseacrher concluded that no association exists between the developed initiatives and utilisation of maternal healthcare services. Data analysis was done over a month.

The findings will be discussed in detail in Chapter 5.

Objective 3.2: To compare maternal healthcare services utilisation with baseline data after implementation of initiatives to enhance utilisation of maternal healthcare services.

The researcher collected qualitative data for Objective 3.2 using focus group discussions with maternal healthcare providers, community members and post-natal women.

(a) Population

The same population used in Cycle 1 was used but with different people to minimise bias. The study targeted population for exploring maternal healthcare utilisation in Mhondoro-Ngezi were maternal healthcare providers (midwives and village health workers), community members (men, chiefs, councillors and politicians) and post-natal women.

(b) Sampling methods

Purposive sampling method was used to recruit maternal healthcare providers, community members and post-natal women. The inclusion criteria were the same as in Cycle 1. The participants were recruited at St. Michaels Mission Hospital during week days through talks by healthcare providers and the researcher and through word of mouth.

(c) Data generation

The researcher conducted three focus group discussions with maternal healthcare providers, community members and postnatal women on maternal healthcare utilisation (see Annexure B) at St. Michaels Mission hospital. The same interview guides used in objective 1.2 were used during the discussions but with additions to address issues that were addressed by the initiatives, such as knowledge on foetal well being and recommended gestational age for initial antenatal visit. Each focus group consisted of six to eight people to allow in-depth contributions. The focus group discussions took 60-90

minutes. A total of three focus group discussions were conducted in this cycle. All discussions were recorded after seeking permission from the participants. Field notes were captured by the same research assistants used in Objective 1.2. The field notes were reviewed by the researcher and the research assistant after data collection while events were still remembered, to help verify the data being collected.

(d) Data analysis

Qualitative data was analysed using Tesch's method (1990) suggested by Creswell (2012:237) as described in objective 1.2. The findings will be discussed in Chapter 5.

Objective 3.3: **To describe the CIG members' reflection on the PAR cycles to enhance utilisation of maternal healthcare services.**

(a) Population

CIG members were the population for reflecting on the process as it helped the members to express how they felt about the experiences from their own subjective perspectives.

(b) Sampling method

The same nine CIG members chosen using purposive sampling method in objective 2.1 reflected on the process. The CIG consisted of maternal healthcare providers, community members and postnatal women who took part in the development, implementation and evaluation of the initiatives.

(c) Data collection and generation

The researcher presented the findings from objective 3.1 and 3.2 to the CIG members. A discussion followed to reflect on the findings and the overall PAR process. Data for describing the CIG members' reflections was collected from the CIG members' reflective journals.

(d) Data analysis

Data was analysed using Tesch's method (1990) suggested by Creswell (2012:237) as described in objective 1.2. Discussions were conducted by the CIG members after the analysis to reach consensus on what was learnt throughout the study. The findings will be discussed in Chapter 5.

New ideas and prepositions were developed and reframed and were incorporated into practice. Those that were rejected posed new questions for another cycle that was

proposed out of the current study. Annexure G shows a summary of the methodology that was used in this study. In the next section, the different methods used to ensure rigour of the study will be discussed.

2.5 Rigour

Rigour refers to the trustworthiness of qualitative data or validity and reliability of the data and the reduction of biasness of quantitative data (Bowling, 2014:160). In this study, it refers to the systematic approach to the research process, awareness of the importance of interpretation, systematic and thoroughness in data collection, analysis and interpretation of the data, the maintenance of meticulous and detailed records of discussions, the use of triangulated data methods and the ability of an independent researcher(s) to re-analyse data using the same processes and methods to reach consensus on the conclusions. In this section the researcher will discuss how trustworthiness of qualitative data, validity and reliability of quantitative data were assured.

2.5.1 Trustworthiness

Trustworthiness is defined by Lo-Biondo-Wood and Haber (2010:588) as the rigour of qualitative research. According to Lincoln and Guba (1985) dependability, credibility, transferability, confirmability and authenticity ensure academic rigour in qualitative research.

- **Dependability**

Dependability refers to evidence that is consistent and stable (Polit & Beck, 2003:36). According to Bhattarcherjee (2012:110), research can be dependable or authentic if two researchers assessing the same phenomena using the same set of evidence independently arrive at the same conclusion. To ensure dependability in this study, the researcher provided adequate information about the process followed during the study which, in this study, was utilisation of maternal healthcare services and the social context in which the study is embedded. This will allow readers to independently authenticate their interpretive inferences as suggested by Bhattarchejee (2012:110). To enhance the dependability of the study, an independent coder also analysed the qualitative data and a consensus discussion took place to reach consensus on the findings.An independent coder is a data analyst working independently on the same data to minimise the chance of errors from coding and to increase the reliability of the data (Saldana, 2010:27). An audit trail to illustrate different stages of data analysis is included (see Annexure K) Other documentation such as field notes, journals and meeting minutes will be available if a need for review arises.

- **Credibility**

Credibility refers to the assurance of plausible interpretations and conclusions (Hoskins & Mariano, 2004:67). To ensure credibility of the study findings, the researcher ensured meticulous data management and analytical techniques as indicated by Bhattarcherjee (2012:110). In this study, the interviews and CIG meeting minutes were transcribed verbatim and well articulated in the write-ups, to ensure that if an independent audit of data collection are needed, the researcher will be able to produce them. The CIG members confirmed the authenticity of the study findings during report back meetings. Credibility was also ensured by triangulation of data sources. Triangulation refers to use of more than one method to increase faith in the validity of findings (Green & Thorogood, 2004:208). In this study, the researcher collected quantitative and qualitative data. The use of quantitative and qualitative data collection methods helped in offsetting the weakness of another and to 'check out' the validity of findings.

- **Transferability**

Transferability refers to the extent to which the results can be generalised to other settings and should give a clear description of the study context, structures, assumptions and processes revealed in the data so that readers can independently assess whether the findings can be transferrable to other settings (Bhattarcherjee, 2012:111). In this study, the researcher described in detail the methodology and study context for easy transferability of the study to other settings.

- **Confirmability**

Confirmability refers to the extent to which the findings reported in interpretive research can be independently confirmed by others (Hoskins & Mariano, 2004:68). In this study, the findings were confirmed by the CIG members and participants.

According to Reason (1998:9), a CIG is threatened with unaware projection and consensus collusion. Unaware projection means deceiving oneself and this can be done because to inquire carefully and critically into those issues which an individual care about, can stir up one's psychological defenses. Consensus collusion means that the co-researchers may band together as a group in defense of their anxieties, so that areas of their experience which challenge their worldview are ignored or not properly explored. In this study, CIG members cycled and re-cycled between action and reflection so that issues were examined several times in different ways and norms were established to enable group members to challenge unwarranted assumptions.

- **Authenticity**

Authenticity refers to the extent to which researchers fairly and faithfully show a range of realities (Polit & Beck, 2012:585). Authenticity of the study emerged in the write up report when the CIG members' experiences in the field were included. The study activities were also authenticated by the CIG members during evaluation and by the hospital health personnel and authorities.

In addition to the above, the researcher:

- employed multiple data collection methods (review of related literature and focus group discussions),
- engaged multiple stakeholders to ensure community participation to increase diversity of data generated,
- ensured the CIG members were aligned with the purpose of the research in order for them to drive the process,
- ensured collaborative and democratic processes by requesting CIG members to respect other members' opinion without judgement,
- ensured there was ongoing reflection from CIG members by encouraging them to write down their reflections for discussion with other members during the next meeting,
- checked data for inaccuracy and misinformation by going over the data repeatedly.
- ensured consistence of data through data checking by the supervisors,
- transferred power, knowledge of the research methodology, ownership of the research questions and process to the group to ensure that the researcher did not dominate the inquiry, and
- the knowledge generated by the CIG members was clearly documented.

The above discussion highlighted the methods used to ensure trustworthiness of the qualitative data in this study. In the next section, the methods used to ensure validity and reliability of the quantitative data will be discussed.

2.5.2 Reliability and validity of the data capturing sheet

Methods used to ensure reliability and validity of quantitative data will be discussed next.

- **Reliability**

Reliability is when scores from an instrument are stable and consistent (Creswell, 2013:159). Scores should be nearly the same when researchers administer the instrument multiple times at different times (Sharma, 2009:220). Reliability of the existing statistics was ensured by collecting data from the Mhondoro-Ngezi District Information System Data

Base. Reliability was also assured by administering the interview guides and check-lists at different time periods. Effort was made to ensure that data were recorded, compiled and analysed accurately.

- **Validity**

Validity is the extent to which an instrument measures the attributes of a concept accurately (Lo-Biondo-Wood & Haber, 2006:286). It influences the internal validity of a study and it affects its reliability to generalisation. Polit and Beck (2003:213) refers to internal validity as the extent to which it is possible to make an inference that the independent variable is truly causing or influencing the dependent variable and that the relationship between the two is not the spurious effect of an extraneous variable. Internal validity of the check-lists was assured by administering the check-lists when there were no national campaign programs in the area that might influence the outcome.

Content validity refers to the extent to which the measure adequately samples the content of the domain that constitutes the construct (Western & Rosenthal, 2003:609) Content validity of the interview guide and check-list were assessed by the supervisors and health experts from the hospital. Content validity of the posters and information booklet was assessed by the Ministry of Health, Child Care Health Promotion Department and hospital staff.

Construct validity refers to the extent to which a measure adequately assesses the construct it purports to assess (Western & Rosenthal, 2003:609). To ensure content validity, relevant literature was used to construct questions for the interview guides and check-list. Pilot testing of the instruments was done to test for validity. There were no alterations made to the interview guides after pilot testing. Changes to the check-list included correction of spelling and scoring scale.

Inherent with any research, a need for ethical clearance and considerations are addressed in the next section.

2.6 Ethical considerations

The ethical considerations were discussed in Chapter 1.

2.7 Conclusion

This chapter has set out some of the main features of the critical theory and its underpinning assumptions, as well as PAR as a design. The methodology used in this

study was discussed. The next chapter will present the results of Cycle 1, the situational analysis phase.

CHAPTER 3

FINDINGS OF CYCLE 1 AND LITERATURE CONTROL

3.1 Introduction

The previous chapter highlighted the philosophical assumptions of Habermas and the research methodology. This chapter discussed the results of Cycle 1, the situational analysis. The objectives of this cycle were to describe the baseline data on maternal morbidity and mortality rates and maternal healthcare services utilisation and to explore and describe maternal healthcare services utilisation in Mhondoro-Ngezi district. Quantitative and qualitative data for Cycle 1 were collected and analysed sequentially during the month of August and September 2016.

Quantitative data was collected by the researcher from existing information from Mhondoro-Ngezi district hospital-based records using a data capturing sheet to determine maternal healthcare services utilisation, maternal morbidity and mortality rates and available resources. The data capturing sheet was divided into four sections. Section A captured data on maternal mortality statistics, nature of complications and number of obstetrics complications transferred. Patients who were transferred to Harare Central Hospital were followed up to ascertain the outcome. Section B captured data on gestational age at booking, number of antenatal visits, total number of deliveries at the healthcare facility and total number of postnatal attendances at the health centre at 3 days, 7 days and 6 weeks as well as services offered.

Section C was supposed to be used for recording maternal audit meetings conducted in the district, number of cases discussed, number of professionals who attended and the outcome, but there were no audit meetings done. Section D recorded available resources such as health personnel, facilities and other technicalities. Strata software programme version 14.0 was used to analyse the data. Descriptive and inferential statistics related to utilisation of maternal healthcare services during antenatal, delivery and postnatal were generated by means of frequency tables.

Qualitative data was collected using three focus group discussions with purposively selected maternal healthcare providers, community members and post-natal women. A literature search on global, regional and national utilisation of maternal healthcare services during pregnancy, delivery and the postnatal period was conducted by the researcher to ascertain factors associated with utilisation of maternal healthcare services and initiatives used elsewhere to enhance utilisation of maternal healthcare services. The information was used to construct questions for the focus group discussions. The issues that were

discussed during focus group discussions included women preferred maternal healthcare provider during pregnancy, delivery and postnatal period, the reasons for the preferred maternal healthcare provider, what could be done to influence women to utilise maternal healthcare services and what initiatives could be developed for enhancing utilisation of maternal healthcare services. Tesch's (1990) method of content analysis was used to analyse the generated data. The collected data was analysed, reflected on and interpreted by the assembled CIG members and utilised as a basis for the next cycle in Chapter 4.

The researcher will first present the description of the health facilities, then the quantitative results (Section A) which describe baseline data on maternal healthcare services utilisation, maternal morbidity and mortality rates and available resources, followed by qualitative findings (Section B) which focus on factors influencing maternal healthcare services utilisation in the district. Presentation of the results will be integrated with literature.

3.2 Description of health facilities

Mhondoro-Ngezi district comprises of 17 health institutions namely, Battlefields Clinic, Bururu Clinic, Chingondo Clinic, Donain Clinic, Dondoshava Clinic, Gavhunga Clinic, Bumbe Clinic, Mafindifindi Clinic, Manyewe Clinic, Manyoni Clinic, Mukarati Clinic, Murambwa Clinic, Muzvezve Clinic, Ngezi Rural Health Clinic, St. Michaels Mission Hospital, Turf Clinic and Twin Tops Clinic. St. Michaels Mission Hospital serves as the District Hospital. St. Michaels Mission has a Family and Child Health Department which is located outside the main hospital where antenatal care and postnatal care services are offered. Maternity and delivery wards are situated within the hospital. Turf Clinic, Twin Tops Clinic and Battlefield Clinic are privately owned by Hartely Platinum mine, a private doctor and the army respectively.

All the clinics in the district offer antenatal, delivery and postnatal care services over and above other curative and health promotion programmes. Patients requiring the services of a medical doctor are referred to the district hospital where radiological, laboratory and operating theatre should be available. Subject to availability of human and material resources, common surgical procedures such as caesarean section, laparatomy and setting of fractures should be managed at district hospitals. Women seeking ANC services are provided an ANC card at the health facility. At the initial visit, health personnel fill in an ANC registration register, and it remains at the health facility. During subsequent visits, the health personnel tally the visit on a tally sheet that is used to compile the monthly statistics and fill in the women's card based on the services offered. The study was undertaken at St. Michaels Mission Hospital as all referrals from the clinics in the district are cared for at the

hospital and the results provided an overview of maternal healthcare utilisation of the whole district.

Ideally, patients who cannot be managed at Mhondoro-Ngezi district hospital were supposed to be referred to Provincial hospital (tertiary level of care), but due to transport and distance problems, patients are referred to the nearest health facility, Harare Central Hospital (quaternary level of care) for further management. At Harare Central Hospital specialist doctors in the various medical specialities are available.

3.3 Description of antenatal care utilisation

Antenatal care has a tremendous impact on the health of the mother and the unborn baby (Bhimani, Vacchani & Kartha, 2015:253). To improve the health outcomes of both the mother and the baby, the WHO (2016:2574-5) recommends the initial contact visits to be in the first trimester, followed by two contacts in the second trimester and five contacts scheduled for the third trimester. Utilisation of antenatal care services is crucial because women are offered information and advice about related complications and possible interventions for early detection and management of complications. It is also an opportune time to implement a birth preparedness plan. Antenatal care services offered in Zimbabwe health facilities include initial antenatal booking and repeat contact visits. Although ANC in Zimbabwe have been strengthened and expanded over the last decades and high ANC coverage are reported, most women book for ANC after the recommended 14 weeks gestational period. Women in Zimbabwe access ANC by visiting a health centre, there are no domiciliary visits. The following section will present the results of the initial and repeat ANC contact visits and the services offered during the initial ANC visit.

3.3.1 Initial antenatal care contact visit

Services offered during the initial ANC visit include routine health assessment. Routine health assessment included subjective and objective data collection. Subjective data solicit information on medical history, obstetric history and current pregnancy while objective data concentrates on physical examination from head to toe, vital observations (temperature, pulse, blood pressure and urinalysis checking) and routine investigations, such as HIV test, rapid plasma reagent test (RPR), determination of Rhesus factor and provision of intermittent preventive treatment (IPT) for malaria. Information related to initial ANC contact visit is presented in Figures 3.1, 3.2 and 3.3.

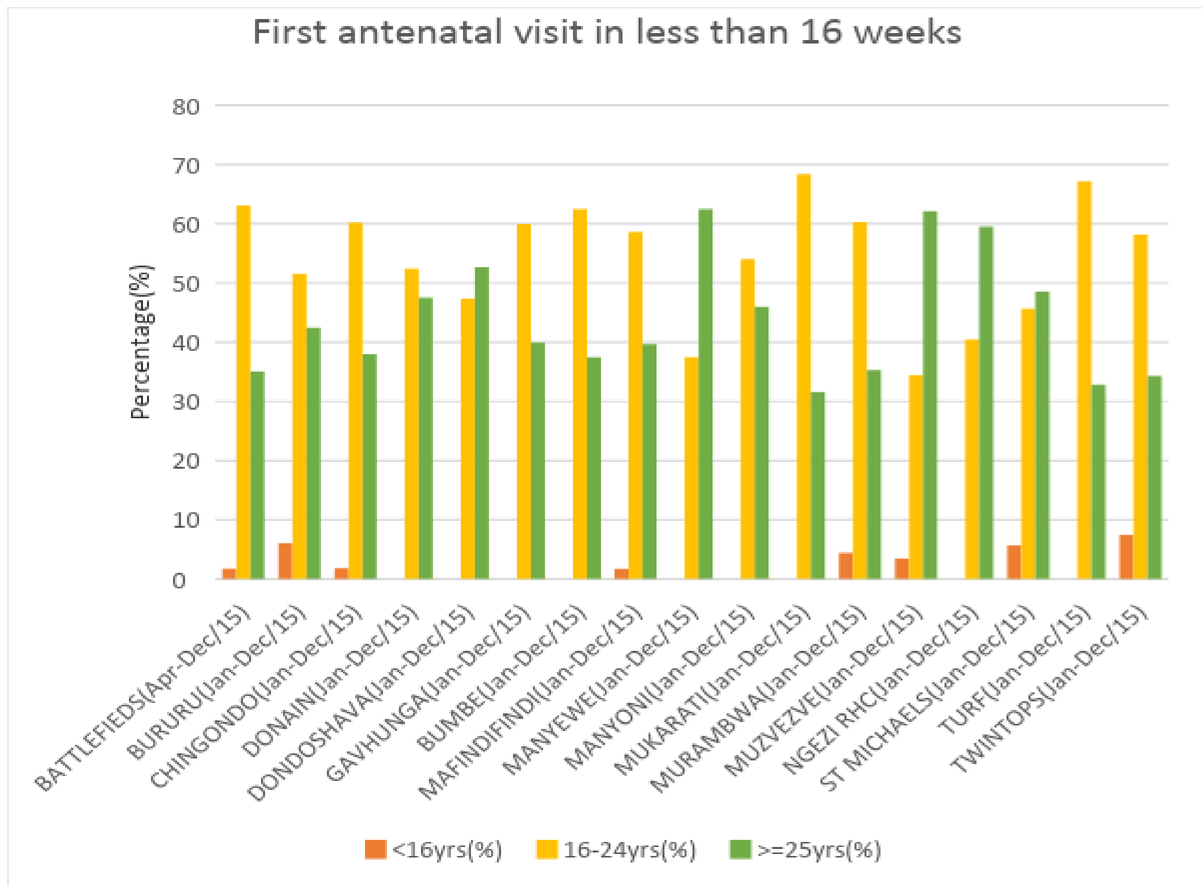


Figure 3.1: First antenatal visit at less than 16 weeks for Mhondoro-Ngezi district Jan–Dec 2015

N=850

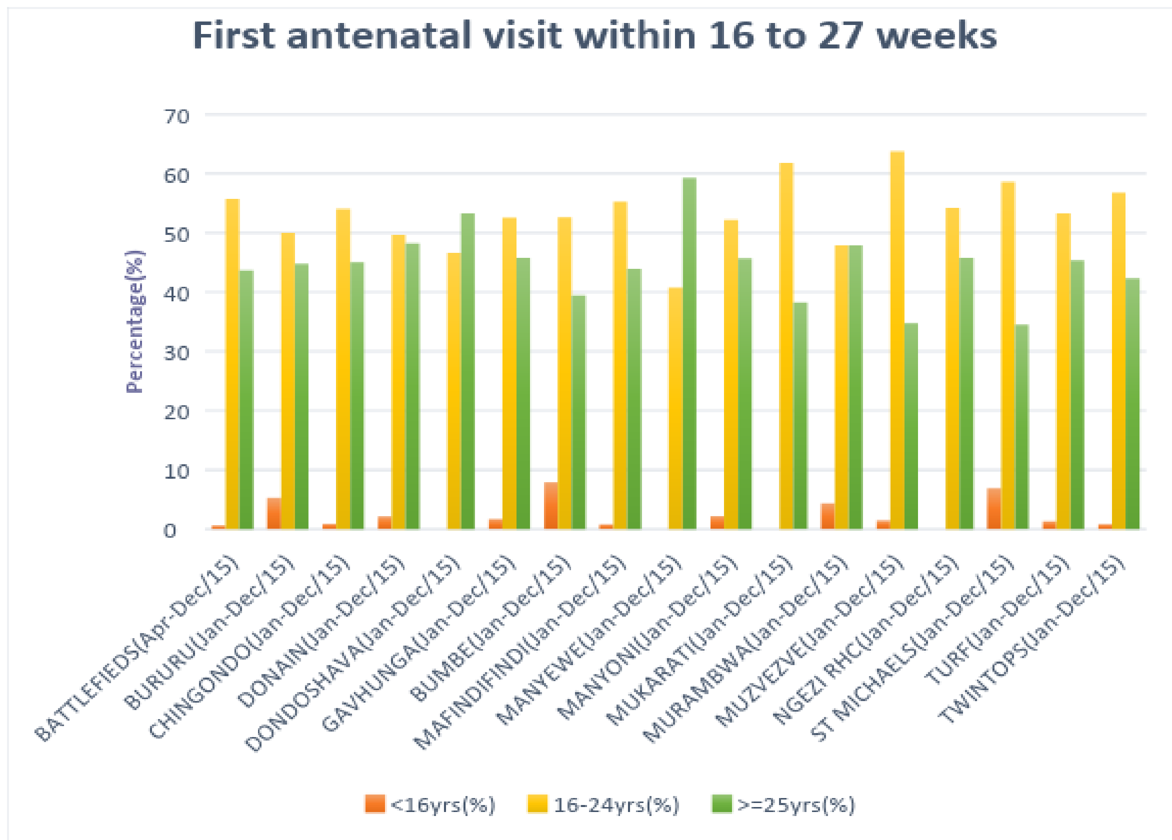


Figure 3.2: First antenatal visit within 16 to 27 weeks for Mhondoro-Ngezi District Jan-Dec 2015

N=2251

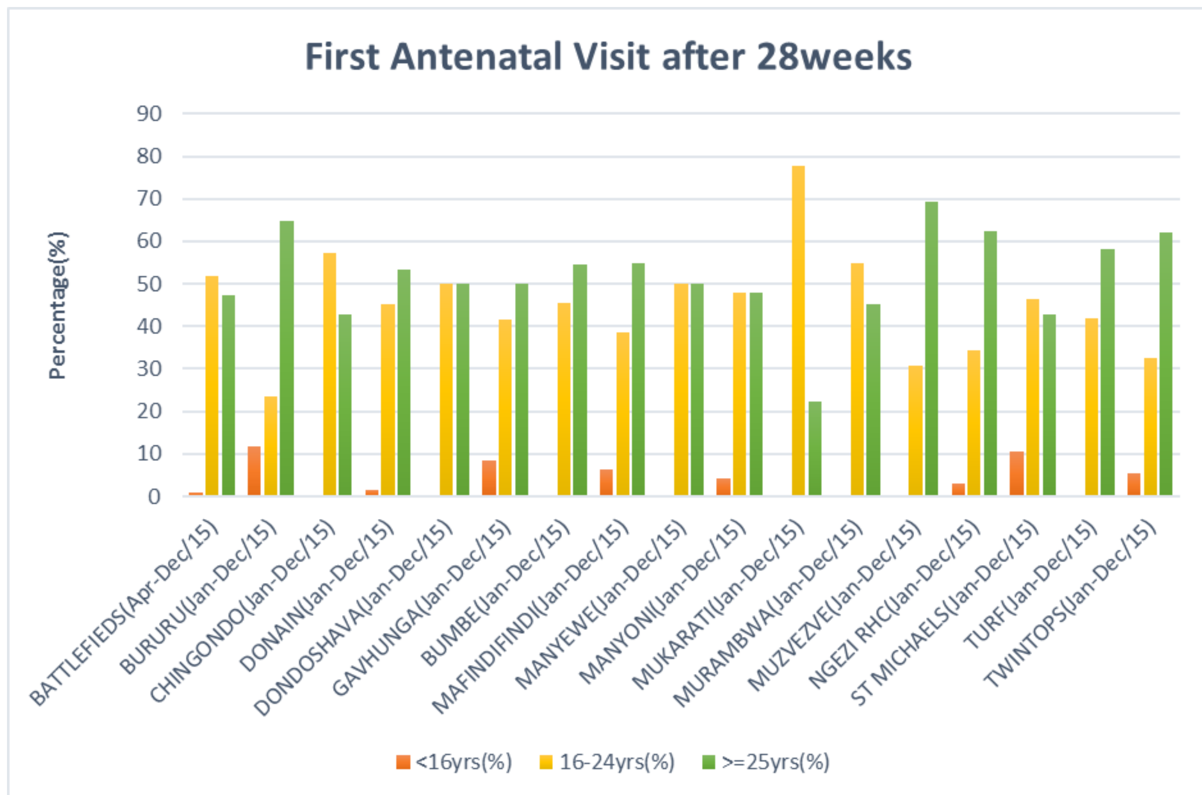


Figure 3.3: First antenatal visit after 28 weeks for Mhondoro-Ngezi District Jan-Dec 2015

A total of 3881 women attended the initial ANC visit in Mhondoro-Ngezi district during 2015 and of these, only 850 (21.9%) of the women attended the initial ANC before the recommended 16 weeks of pregnancy. In addition, 58% of the women attended their first ANC visit between 16-24 weeks and 20.1% from 24 weeks and above. The mentioned figures translate to 78.9% of the women who booked late. These results are lower than those reported at national level where 39% attended the initial visit within the first semester (ZIMSTAT & ICF International 2016:142).

The purpose of ANC is to improve the health outcome of both the woman and the baby (WHO, 2016:1). To achieve a maximum benefit, ANC should be initiated during the first trimester of pregnancy so that any complications are detected and attended to early and timely. Late booking reported in this study is a cause of concern as women miss the opportunity of early detection of risk factors and prompt intervention and this ultimately leads to poor outcomes for both the mother and the baby. Consistent with these results, Bhimani, Vacchani and Kartha (2015:255) also reported low (24.8%) initial ANC visit within the first trimester, 54.3% within the second trimester and 10.1% within the third trimester in a community based cross sectional study in rural India.

Reasons cited for poor utilisation of ANC services in the study were lack of knowledge (58.9%), family refusal and financial constraints (10.7%) and fear of side effects of injections and tablets (8.1%.). The proportion of initial visit in the second and third trimester is higher in this study than in a study conducted previously in urban Zimbabwe by Mandoreba and Mokwena (2006:135), where 12.0% and 33. 3% were reported respectively. Contrary, high initial attendances were reported across all age groups in a study conducted in selected regions in Ghana, Kenya and Malawi by Pell, Menaca, Were and Afrah (2013:3). High attendances were also reported in a study conducted in Nigeria by Ayele, Belayihun, Teji and Ayana (2014:4) where 86.1% attended antenatal care for their recent pregnancy.

The results also show that for those women who attended initial ANC visits, 3.9% were below 16 years, 39.8% were aged between 16 to 24 years and 56.3% were above 25 years. The descriptive statistics revealed that on average (mean), one woman under 16 years of age per clinic in Mhondoro-Ngezi district had an initial visit done under 16 weeks, with a standard deviation (sd) of 1.41. Twenty-eight women aged between 16 and 24 years of age on average had their initial ANC visit under 16 weeks (sd=20.0) while on average 44 women (sd=14.7) aged 25 years or above per clinic in Mhondoro–Ngezi district had their initial visit under 16 weeks. The possible explanation for the high attendance in the 25 years and above age group may be the fact that women in this age group are older and mature and are cognisant of the importance of early booking. The results from this study are consistent with those in a study conducted in Nigeria by Dahiru and Oche (2015:5) in which, being in the age group of 35 and above, consistently increased the odds of utilisation of ANC by over 200%.

The results of this study also indicate that there were very few (3.9%) adolescent pregnancies in 2015 in Mhondoro-Ngezi district and this is lower than 9% reported in the National Adolescent Fertility study technical report (MOHCC, 2016:39). These results mirror the global trend where the WHO (2017:1) reports that there has been a decrease in adolescent pregnancy, in which the global figures stands at 11% of all births. This development is encouraging as early sexual debut and child bearing is a significant risk for maternal and neonatal health.

The following section will present maternal health services that were offered during the initial visit. These services were obtained from the existing maternal health records at St. Micheals Mission district hospital health information system. In the records health

assessment was not captured separately. The assumption is that all pregnant women who attend ANC undergo the routine health assessment.

3.3.2 Maternal services offered during pregnancy

At the initial ANC visit pregnant women in Mhondoro-Ngezi district are screened for syphilis, HIV infection and malaria. A test for determination of Rhesus factor is also done. The services will be discussed in more detail next.

3.3.2.1 Rapid plasma reagent testing during ANC visit

The rapid plasma reagent test (RPR) is done to check for the presence of syphilis antibodies. WHO (2006:1) recommends that all pregnant women should be screened for syphilis at the first antenatal visit within the first trimester and again in late pregnancy. Women who test positive are treated and their partners are followed up and treated too. Untreated syphilis in pregnancy can cause stillbirths, spontaneous abortion, low birth weight, perinatal death and neonatal infections (WHO, 2006:3). Due to resource constraints, pregnant women in Zimbabwe are only screened for syphilis during the initial ANC booking. In this study, a total of 3697 rapid plasma reagent tests were done in the whole district in 2015, and out of these, the majority 3649 (98.7%) were negative. When the rapid plasma reagent tests that were done were compared with the number of pregnant women who booked their pregnancy during the same period, the results indicate that only 184 (4.7%) pregnant women did not have the test done. The high syphilis screening rate in this study are consistent with those from a study conducted in Brazil by Domingues, Szwarcwald, Souza Junior and Leal (2014:770), where a syphilis testing coverage rate of 89.1% in one test was recorded. In a case control study conducted by Dassar, Sarkodie and Mayaud (2015:5) in Ghana among women admitted for delivery, 19.9% of women were not screened for syphilis. The reason cited for not screening in the study was having attended ANC at a private health facility where the health facilities were relatively small, and the midwife managed maternity homes or clinics with limited infrastructure and staff. Figure 3.4 shows the results of the rapid plasma reagent tests done per clinic in the district.

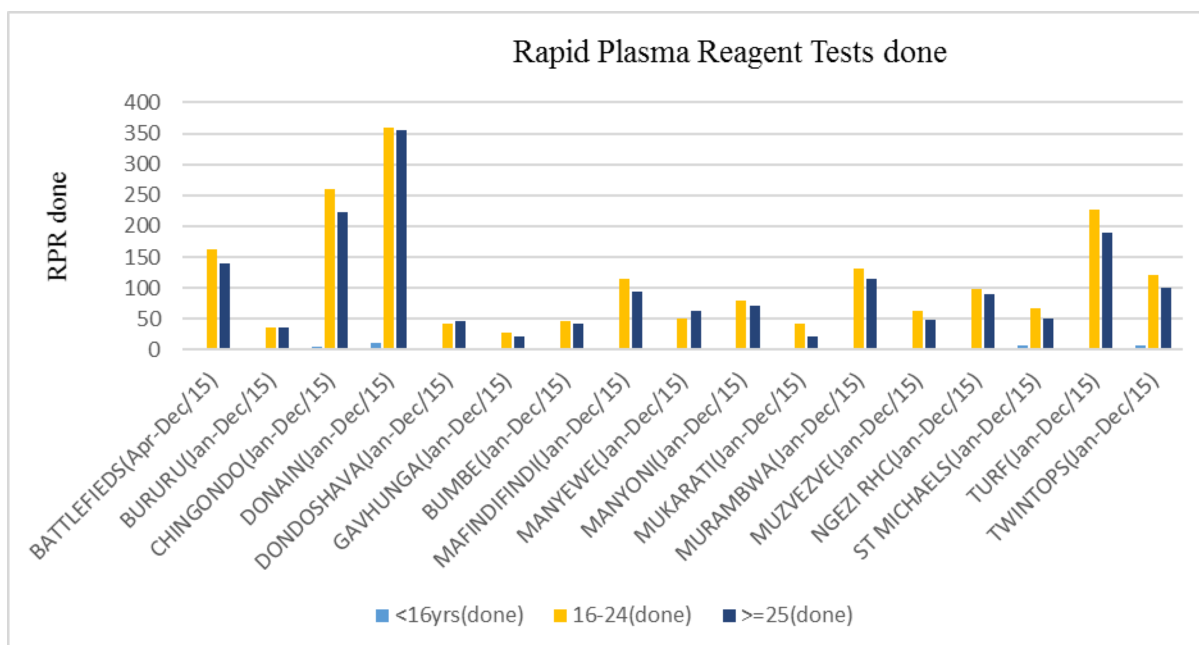


Figure 3.4: Rapid Plasma Reagent Tests done for Mhondoro-Ngezi District Jan-Dec 2015

The descriptive statistics analysis indicated that on average four RPR (sd=3.26) tests were done per clinic in Mhondoro–Ngezi district for the women under 16 years of age and most of the rapid plasma reagent tests in this age group were negative (median=0). In the 16-24 years age group, 114 rapid plasma reagent tests per clinic were done on average (sd=91.8) and of these, an average of 2.2% had a positive rapid plasma reagent test. In the 25 years and above age group, an average of 100% rapid plasma reagent tests were done per clinic (sd=86.7) and about 2% of these were positive. The results show a low syphilis prevalence rate in the district. However, since most women booked late, the women were screened, diagnosed and treated after the recommended gestational age. These results reflect the need to intensify health education on early antenatal booking. This is because sexually transmitted infections like syphilis increase the risk of HIV and AIDS transmission. A low syphilis prevalence in pregnancy of 1.02% was also reported in a hospital-based cohort study (Domingues, Souza Junior & Leal, 2014:770) conducted in Brazil among postpartum women between 2011 and 2012. Figure 3.5 shows the rapid plasma reagent positive results for the district from January 2015 to December 2015.

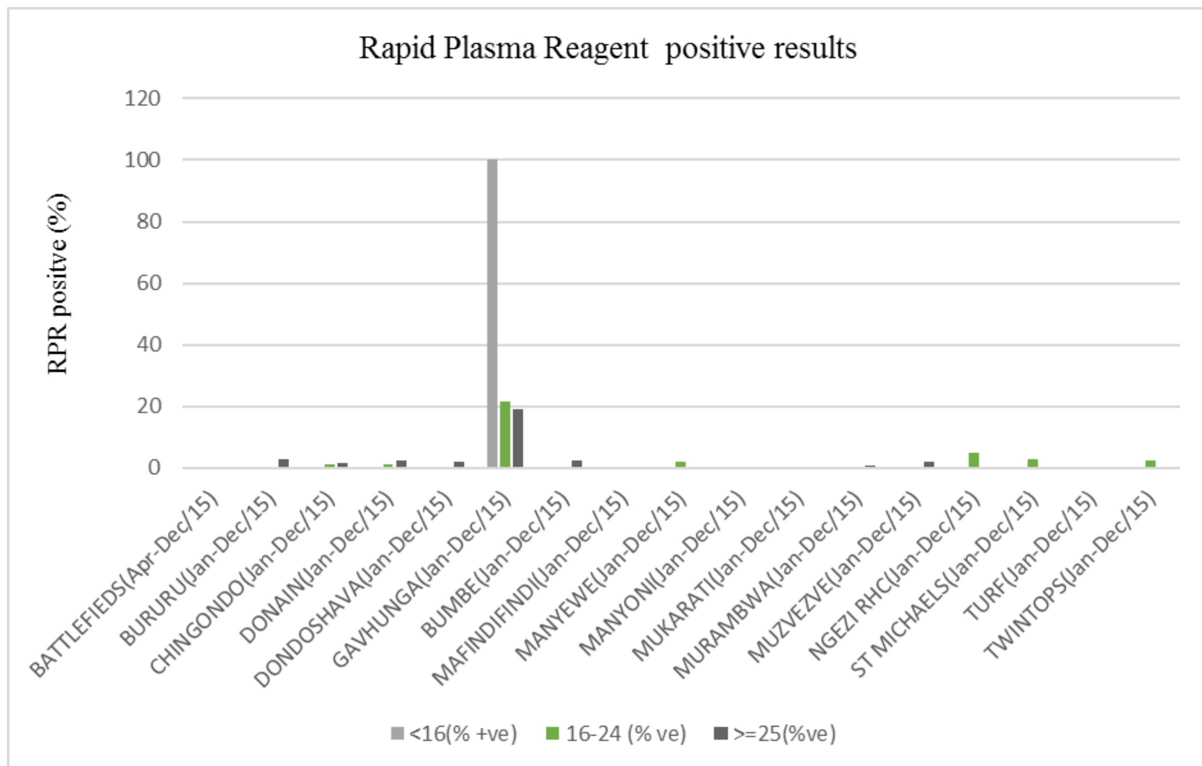


Figure 3.5: Rapid Plasma Reagent positive results for Mhondoro-Ngezi District Jan-Dec 2015

3.3.2.2 Human Immune Virus (HIV) testing during ANC visit

An estimated 152 000 children in Zimbabwe are living with HIV and mother-to-child transmission is responsible for more than 90% of HIV infection in children (EDLIZ, 2015:142). HIV transmission can occur during pregnancy, delivery and postnatal through breastfeeding. In high prevalence countries like Zimbabwe, the WHO (2016:5) recommends routine provider-initiated testing and counselling to all pregnant women in all health facilities. Byrne, Fakoya and Harding (2012:18) add that early detection of antenatal HIV infection ensures that pregnancy and delivery, as well as infant feeding options, can be managed thereby minimising the risk of vertical HIV transmission.

In this study, a total of 3967 pregnant women were voluntarily counselled and tested for HIV during ANC in Mhondoro-Ngezi district. This figure exceeds the number of women who booked for ANC in the district, which was 3881 and this could be because women from other districts had HIV tests done in the district. The results of this study are higher than the national figures in which the Zimbabwe Demographic Health Survey (2015:263) indicated that approximately 90.2% of women, who were pregnant in the two years before the survey, were tested for HIV during antenatal care. In contrast to the high HIV testing in pregnancy in this study, the Zambian 2007 Demographic Health Survey reported that 50% of pregnant women received voluntary counselling and testing for HIV (Kyei, Chansa & Gabrysch,

2012:7), while in rural Uganda, Larsson, Thorson, Pariyo, Waiswa, Kadobera, Marrone and Ekstro (2012:3) reported that only 64% of women had HIV tests done during the current pregnancy. UNICEF (2014:1) reports that in the Nepal Multiple Indicator Cluster Survey (MICS) for 2013-2014, the percentage of women who did not receive HIV testing and counselling during antenatal care was 76%. Figure 3.6 shows the results of HIV tests done per clinic in the district.

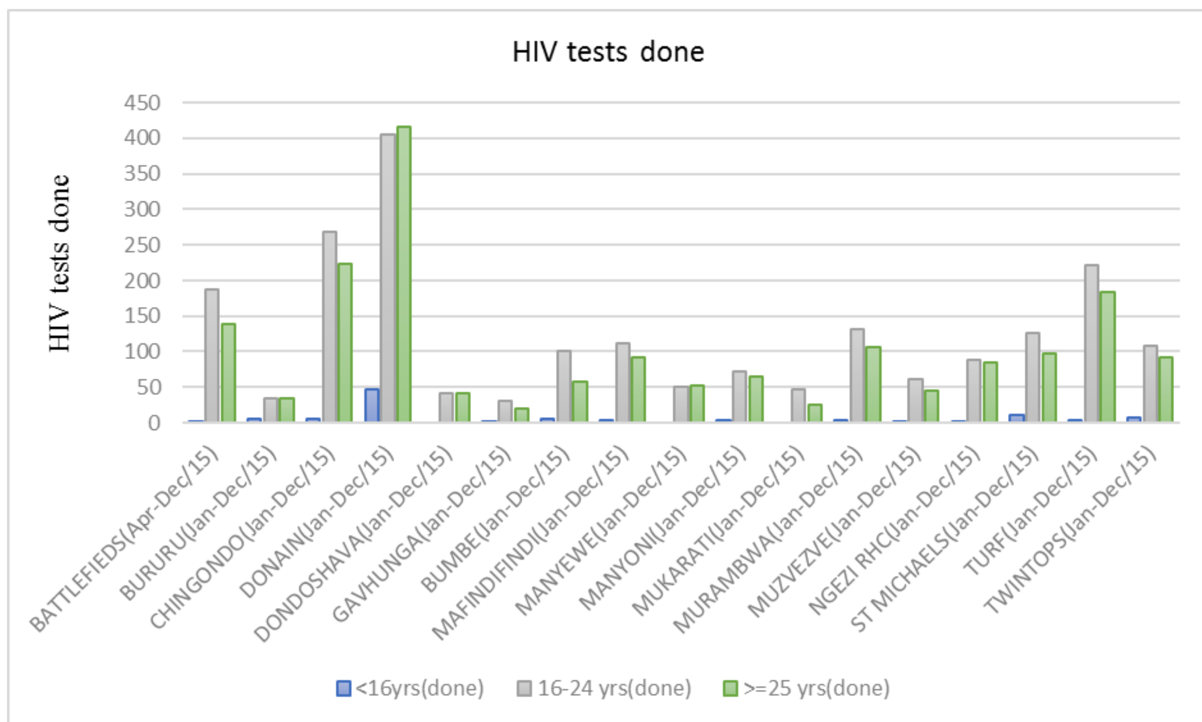


Figure 3.6: Human Immune Virus tests for Mhondoro-Ngezi District Jan-Dec 2015

Out of a total of 3967 pregnant women who were tested for HIV in the district, only 272 (6.9%) tested positive. The descriptive statistics showed that on average six HIV (sd=10.95) tests were done per clinic in Mhondoro–Ngezi district for the women under 16 years of age and most of the HIV tests in this age group were negative (median=3). In the 16-24 years age group, 123 HIV tests per clinic were done on average (sd=99.3). In the 25 years and above age group, an average of 104 HIV tests were done per clinic (sd=97.4). These results are suggestive of the success of the PMTCT programs in the district. In a cross-section study in six districts in Rwanda, USAID, MCHIP and Rwanda Ministry of Health (2014:21) reported a low HIV positive prevalence of 3.3% among pregnant women while the overall maternal HIV prevalence was 4.6 % in a study conducted by Malonga, Ntambue, Ngatu, Katshiz, Mukenge, Mundongo, Muchanga et al (2015:3) in the Democratic Republic of the Congo. Figure 3.7 indicates HIV positive tests in Mhondoro-Ngezi district during the year 2015.

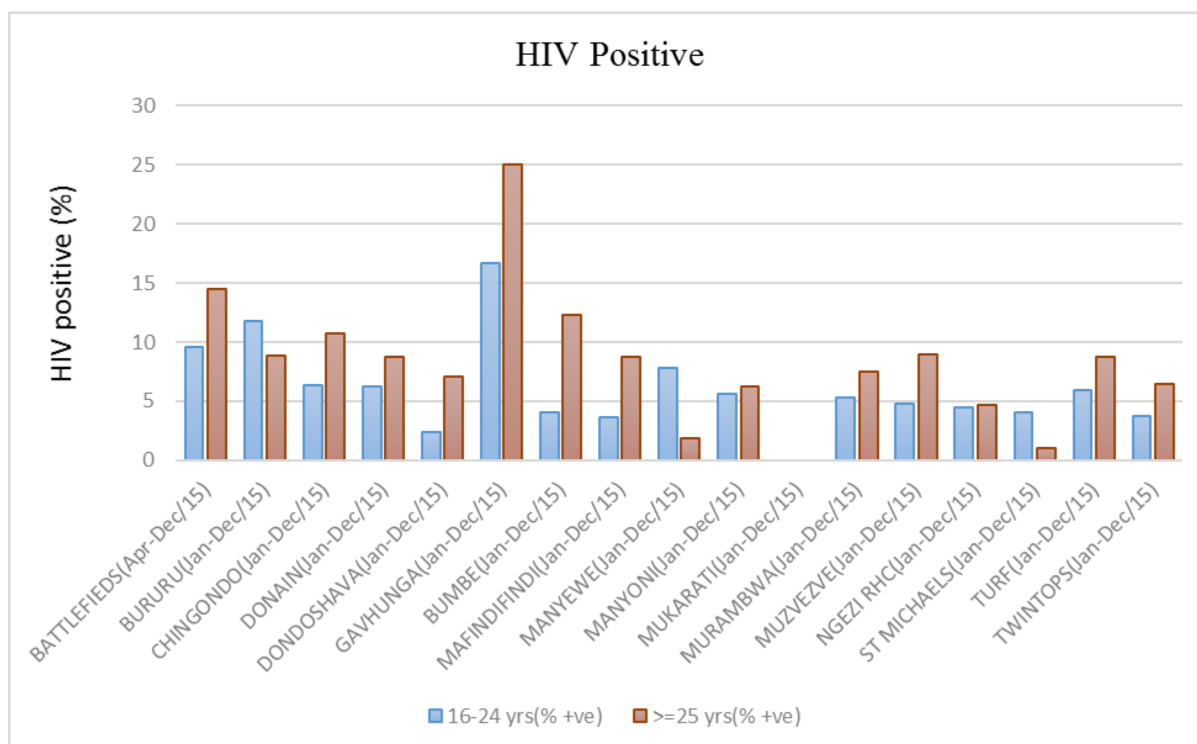


Figure 3.7: Human Immune Virus positive tests for Mhondoro-Ngezi District Jan-Dec 2015

3.3.2.3 Intermittent preventive treatment for malaria during ANC

Doku, Zankawah and Adu-Gyamfi (2016:1) note that the burden of malaria is huge in sub-Saharan Africa. Malaria is a major cause of spontaneous abortion, low birth weight, premature delivery, stillbirth, maternal anaemia and maternal mortality (ZIMSTAT & ICF International 2016:224). In Zimbabwe, pregnant women who reside in regions where malaria is prevalent are given malaria prophylaxis after 16 weeks of gestational age or after quickening (EDLIZ, 2011:182). Artemether+Lumefantrine (AL) is the intermittent preventive treatment drug of choice in use in Zimbabwe and is dispensed after a positive confirmatory rapid diagnostic test (RDT) for malaria. In this study, a total of 5025 women received IPT of which 2507 (49.9%) women received IPT1, 1625 (32.3%) received IPT 2 and 893 (17.8%) received IPT 3. Generally, there is low issuing of IPT among pregnant women in the district, which could be indicative of low malaria prevalence.

The descriptive statistics showed that on average 4 women received IPT (sd=4.2) per clinic in Mhondoro–Ngezi district for the women under 16 years of age and most women in this age group received 3 doses (median=3). In the 16-24 years age group, 4 IPT were given on average (sd=136.4). In the 25 years and above age group, an average of 136 women

received IPT tablets per clinic (sd=123.4). The descriptive statistics are an indication that more women in the 25 years and above age group received IPT in the district. This is not surprising since more women in this age group booked and were followed up. In addition, some women (20.1%) in Mhondoro-Ngezi district miss the opportunity of receiving the recommended three doses of IPT during pregnancy because they book their pregnancies in the third trimester. There is need for intensive health education and awareness campaigns on the need for attending scheduled ANC contact visits.

Contrary to these results, Doku, Zankawah and Adu-Gyamfi (2016:5) reported that 85% of pregnant women received at least one dose of sulphadoxine-pyrimethamine (SP) in a study they conducted in Ghana, 32% of women indicated that they were not given SP during their first ANC visit while 25.5% did not take SP during the subsequent visit. In Zambia, 88.8% of pregnant women received IPT for malaria (Kyei, Chansa & Gabrysch, 2012:736). Figure 3.8 shows the IPT for malaria.

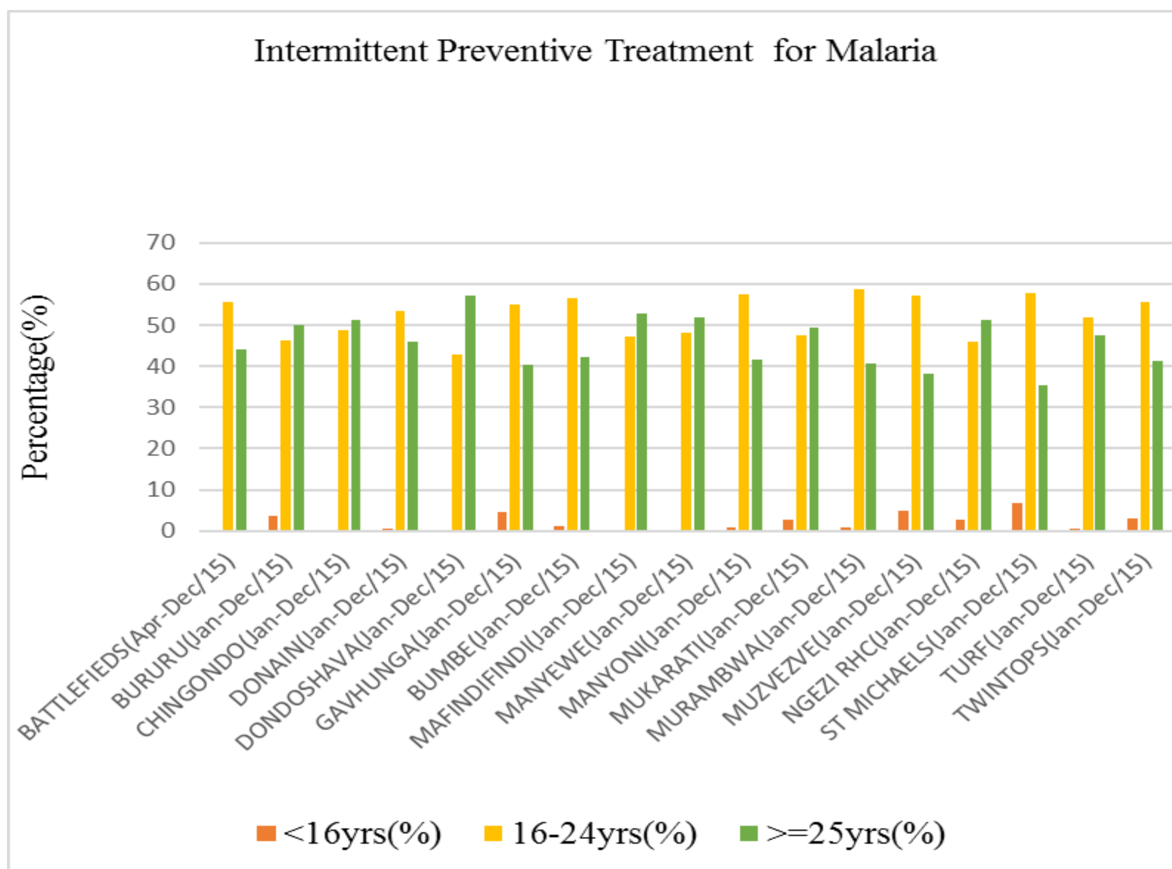


Figure 3.8: Intermittent Preventive Treatment for malaria for Mhondoro-Ngezi District Jan-Dec 2015

This section discussed initial ANC visits and services offered during the initial visit. Generally, there was late booking across all age groups, high HIV and RPR testing among pregnant women and low HIV and RPR positive results respectively, and low malaria prevalence in the district. The results point to a need to create awareness on early ANC booking. The next section will discuss antenatal care contact repeat visits.

3.3.3. Antenatal care contact repeat visits

Generally, there were low repeat contact visits attendances across the district. WHO (2016:1) recommends eight or more ANC visits during pregnancy for monitoring the health of the mother and the baby. In this study, out of 8709 women who attended repeat contact visits in Mhondoro-Ngezi district, about 2974 (34.2%) attended the second visit and 2276 (26.1%) attended a third visit. Only 3459 (39.7%) women attended at least four or more ANC visits in 2015 (Figure 3.4), showing a decrease from 76% reported by ZIMSTAT and ICF International (2016:143) at national level in the same period.

The results of the descriptive statistics showed that on average 4 repeats fourth ANC contact visits (sd=5.27) were done per clinic in Mhondoro-Ngezi district for the women under 16 years of age in contrast to the recommended eight visits. In the 16-24 years age group, 106 repeats four or more ANC contact visits per clinic were done with a standard deviation of 85.4. In the 25 years and above age group, an average of 93 repeat fourth ANC contact visits were done per clinic (sd=77.2). The results are consistent with those from a study done in the Eastern Cape in South Africa by Tsawe and Susuman (2014:4), where a higher proportion of women aged 35 years and above attended more than four antenatal visits. This is an age group that is mature and experienced hence they may be aware of benefits of following up during pregnancy. In contrast, findings from Nepal (Pandey & Karki, 2014:214) revealed that women in the lower age group were more likely to utilise ANC services more than four times than the women in higher age group.

The results from this study demonstrated that a proportion of women in Mhondoro-Ngezi district received fewer than the expected minimum number of ANC repeat contact visits and do not receive ANC services in the first trimester. These results are a cause for concern in view of the new WHO (2016:2574) guidelines, in which a minimum of eight routine antenatal visits are recommended to prevent perinatal deaths. In addition, in view of the relationship between ANC attendance and institutional deliveries, a study conducted in Zimbabwe by Muchabaiwa, Mazambani, Chigusiwa, Bindu and Mudavanhu (2012:153), revealed that the odds for delivery at a health centre are 2.1 times higher among women who attended antenatal sessions than amongst women who did not get ANC at one percent level of significance.

The results in this study suggest that there are still some missed opportunities for ANC monitoring and early and timely intervention, especially in the provision of PMTCT. The results in this study are also consistent with results from a study conducted in Nigeria by Ayele, Belayihun, Teji and Ayana, (2014:4) where only 38.8% women received four or more repeat antenatal care. Few four or more repeat ANC visits were also reported in a study conducted by Ergano, Getachew, Seyum and Negash (2012:115) in South Omo pastoral areas of Ethiopia and in South Ari where 21% and 25% of mothers had more than four and five repeat ANC visits respectively. In Eastern Cape in South Africa, more than half (58.4%) attended at least four antenatal visits and 41.6% attended five or more antenatal visits (Tsawe & Susuman, 2014:4). UNICEF (2014:1) also reports a low (40%) percentage of women who received four or more antenatal visits in Nepal. Generally, there are low repeat antenatal visits across the studies. There is a need for reproductive health policy makers to go back to the drawing board and formulate strategies to encourage women to return for antenatal care. Figure 3.9 shows the number of women who attended four or more repeat visits in Mhondoro-Ngezi district in 2015.

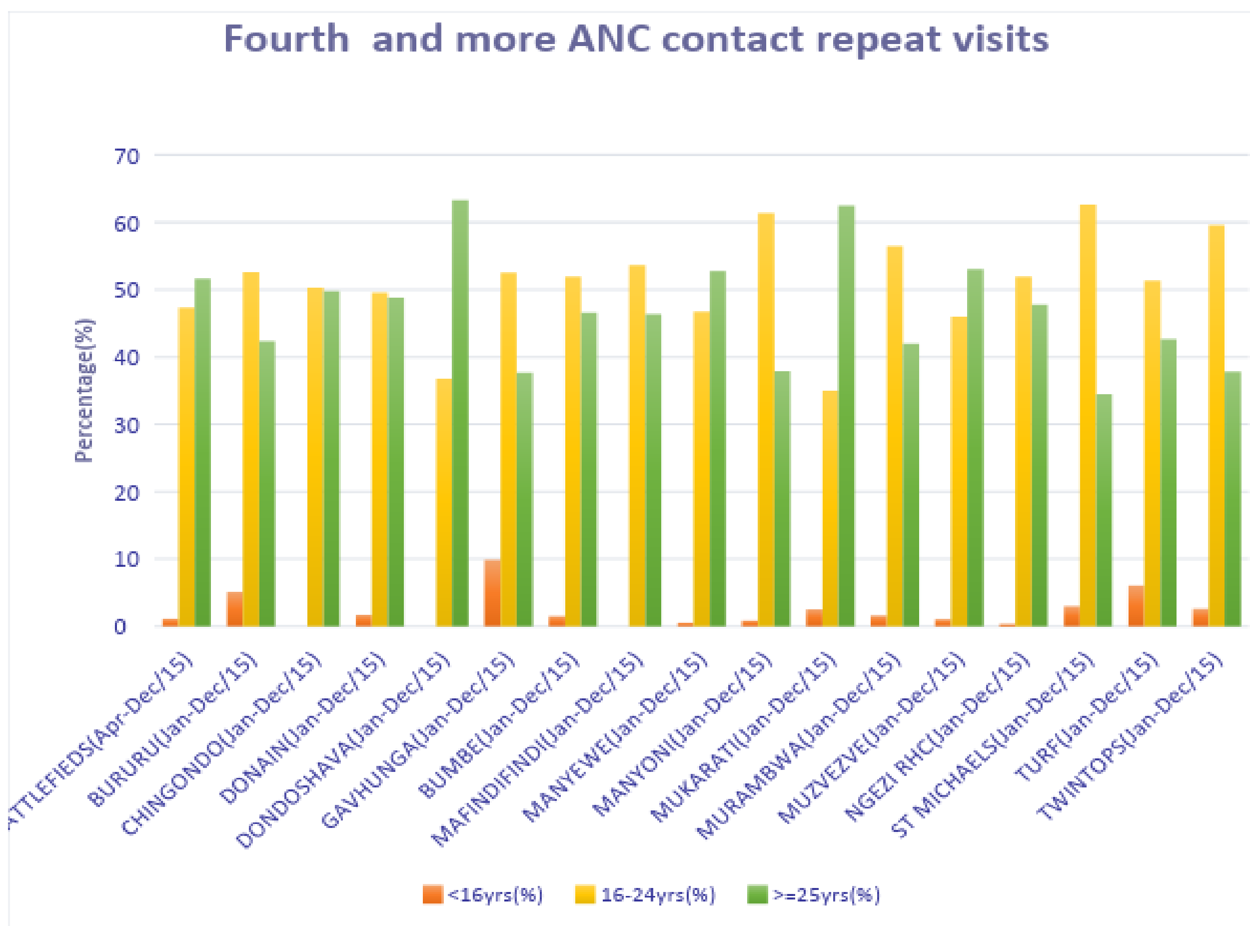


Figure 3.9: Fourth and more ANC contact repeats visit for Mhondoro-Ngezi District Jan-Dec 2015

N=3459

The results of the antenatal care attendances and services utilisation have been presented and discussed. Generally, the results demonstrated that pregnant women in Mhondoro-Ngezi district book for ANC late, the majority undergo RPR and HIV testing, and very low prevalence rates were recorded. In addition, very few women tested positive for HIV and few women attended four or more repeat visits during their pregnancy. The following section will present results of deliveries that were conducted in the district by trained nurses at health institutes and those conducted at home by trained birth attendants or by untrained community members. Data on HIV status during delivery and prevention of mother to child at delivery interventions will also be discussed.

3.4 Description of intrapartum care utilisation

United Nations Human Rights Organization (UNHRO), Makarere University, Uganda Ministry of Health, Supporting the use of research evidence (SURE), Regional East Africa Community Health Policy Initiative (REACH) and EVIPnet (2012:18) refer to intrapartum care as the provision of delivery services and immediate postpartum care for mothers and

their newborn babies. Dahiru and Oche (2015:7) state that access to skilled care at birth is one of the strategies that can reduce both maternal and child mortality. Hence there is a need for women to deliver at a health facility.

The overall births in Mhondoro-Ngezi district in 2015 were 2529 (Figure 3.9). Of these, 2509 (99.2%) of the births were live deliveries while 20 (0.8%) were stillbirths. Of these births, 2204 (87.9%) were delivered at a health facility, 36 (1.4%) were at home by trained birth attendants while 269 (10, 7%) of the births were at home by untrained birth attendants (other). Deliveries by trained health personnel are greater than those reported for the National figures in the ZDHS 2015, where 77% of live births in the five years preceding the survey were delivered in a health facility and 20% were home deliveries by untrained traditional birth attendants (ZIMSTAT & ICF International 2016:141).

High rates (73.5%) of skilled birth attendants at birth were also reported in a study conducted in India (Bhattacherjee, Datta, Saha & Manasi, 2013:79). In contrast, only 25.3% and 37% of deliveries occurred in health facilities in Eastern Ethiopia and Nigeria respectively (Ayele, Belayihun, Teji & Ayana, 2014:4, Dahiru & Oche, 2015:4). Reasons cited for preferring home deliveries in Eastern Ethiopia were easy labour (75.9%), feeling ashamed to go to health institutions (11.4%), distance to the health facility (9.7%) and other reasons 3.0%. In Nepal, only 32 % women were reported to have been assisted by skilled birth attendants from the results of 2013-2014 survey conducted by UNICEF (2014:1).

The statistics on whether the births were done by trained or untrained birth attendants were obtained from the clinics return forms that are forwarded to the district hospital each month. All clinics in the district that offer maternal healthcare services also offer antenatal, delivery and postnatal services. Figure 3.10 shows live births recorded in Mhondoro-Ngezi district from January to December 2015, HIV status at delivery will be discussed in the next section.

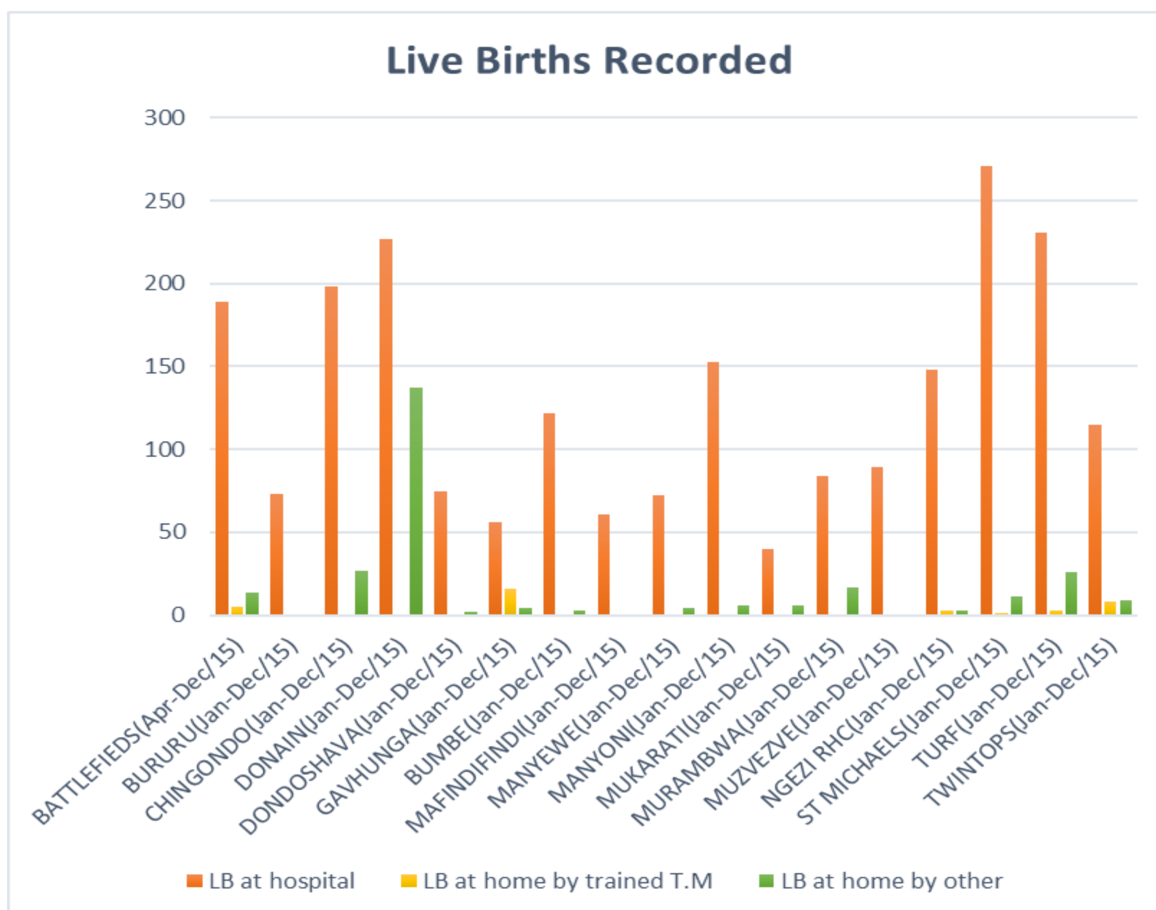


Figure 3.10: Live births recorded for Mhondoro-Ngezi District Jan-Dec 2015

N=2509

3.4.1 Human immune virus (HIV) status of women at delivery

It is important to know the HIV status of women during delivery so that Nevirapine can be administered to the infant born to an HIV positive mother. Of the 2324 deliveries in the district, 36 (1.55%) had no known HIV status at delivery, 1954 (84.1%) were HIV negative at delivery while 334 (14.4%) where HIV positive at delivery (Figure 3.10). These results are lower than that reported in the ZDHS (2015:261) where 91.3% knew their HIV status at delivery.

The descriptive statistics analysis revealed that on average, two women's HIV status (sd=3.84) were not known per clinic in Mhondoro–Ngezi district and most of the HIV tests were negative (84.6%). These results indicate that more women in the district are negative. The health promotion programs should be maintained to ensure a 100% record. Figure 3.11 indicates the HIV status at delivery. PMTCT interventions will be discussed in the next section.

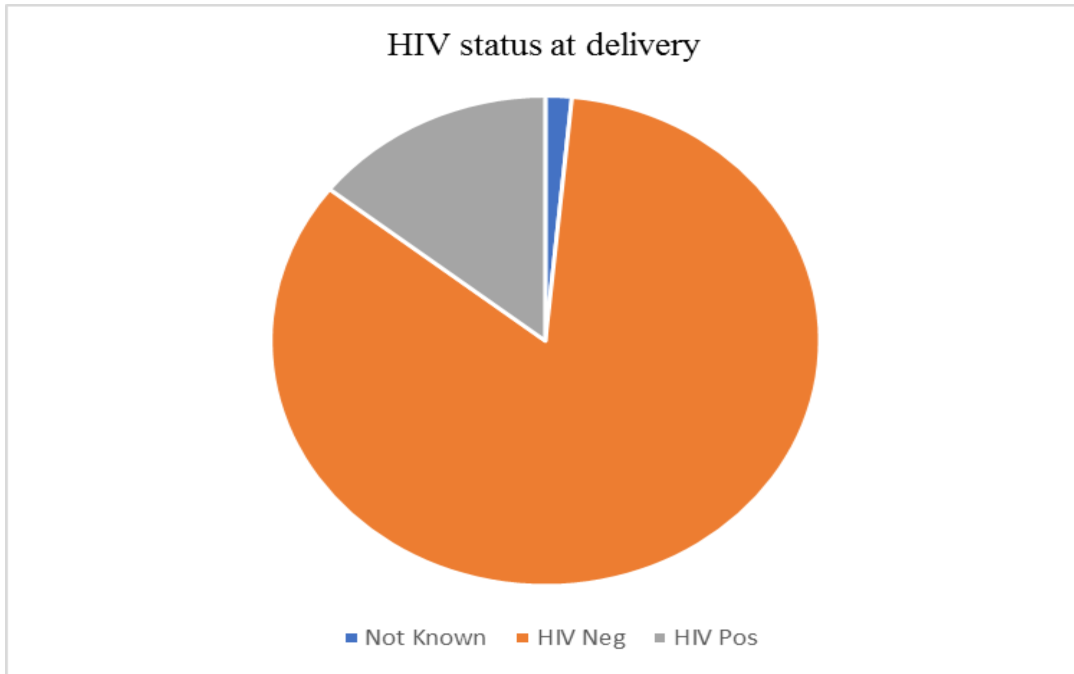


Figure 3.11: HIV status at delivery for Mhondoro-Ngezi District Jan-Dec 2015 N=2324

3.4.2 Prevention of mother to child transmission (PMTCT) at delivery

The WHO (2010:8) refers to transmission of HIV from mother to child during pregnancy, labour or delivery and breastfeeding as mother to child transmission. The rate of transmission of HIV during pregnancy, labour or delivery and breast feeding in the absence of any intervention ranges between 15% and 45% globally (WHO, 2017:1). If HIV prophylaxis treatment is given to both the mother and the infant, the rate of transmission is reportedly reduced to below 5% (WHO, 2017:1). According to WHO guidelines (2015:3), women who are not on anteretroviral therapy and who test HIV-positive in labour are supposed to be given a single dose of Nevirapine 200mg, single dose of Truvada (Tenofovir+Emitricitabine) and Azidothymidine 3 hourly in labour and fixed dose combination should be started the next day. Before these new guidelines, women who were not on anteretroviral therapy and who tested HIV-positive in labour were supposed to be given a single dose of Nevirapine 200mg and a single dose of nevirapine syrup 2mg/kg was to be given to the infant within 72 hours after delivery. The old guideline treatment protocol is the one used in this study.

Of the 334 HIV positive women in the district who delivered, 196 (58.7%) received a single dose of nevirapine 200mg (Figure 3.11). This figure is lower than that reported nationally in 2015 when 85% HIV positive pregnant women received antiretroviral treatment (EDLIZ, 2015:12). WHO (2017:1) reports that globally, the coverage of ART among pregnant and

breastfeeding women living with HIV is 76%. Provision of ART to all pregnant women and breast-feeding women living with HIV improves the mother's health, prevent mother to child transmission of HIV and prevent the horizontal transmission of HIV from the mother to an uninfected sexual partner (WHO, 2015:32). Babies born to HIV positive mothers who received a single dose of Nevirapine syrup 2mg/kg at birth were 306 (91.9%). These results suggest that some mothers are not receiving HIV prophylaxis, yet their babies are receiving it. These results are a cause for concern as those mothers who do not receive prophylaxis may transmit the virus during breast feeding.

The descriptive statistics analysis showed that on average 11 PMTCT (sd=12.7) tests were done per clinic in Mhondoro–Ngezi district for the women and 18 for newborn babies (sd=14). The results suggest that some mothers may not have HIV tests done but allowed their babies to be tested. This could be because the women were not ready to know their results. There is a need for more health education to encourage mothers to be tested so that they can be started on treatment early since the babies may test negative at delivery and sero convert later. Commenting on the reduction of HIV in children in Ghana, Larsson, Ekstro, Pariy, Tomson, Sarowar, Baluk, Galiwang et al (2015:5) noted that HIV infections in children could be reduced by 28% by increasing HIV testing among women seeking ANC and 18% by providing ART to all women who received ARV prophylaxis. Figure 3.12 shows PMTCT antiretroviral therapy for Mhondoro-Ngezi district.

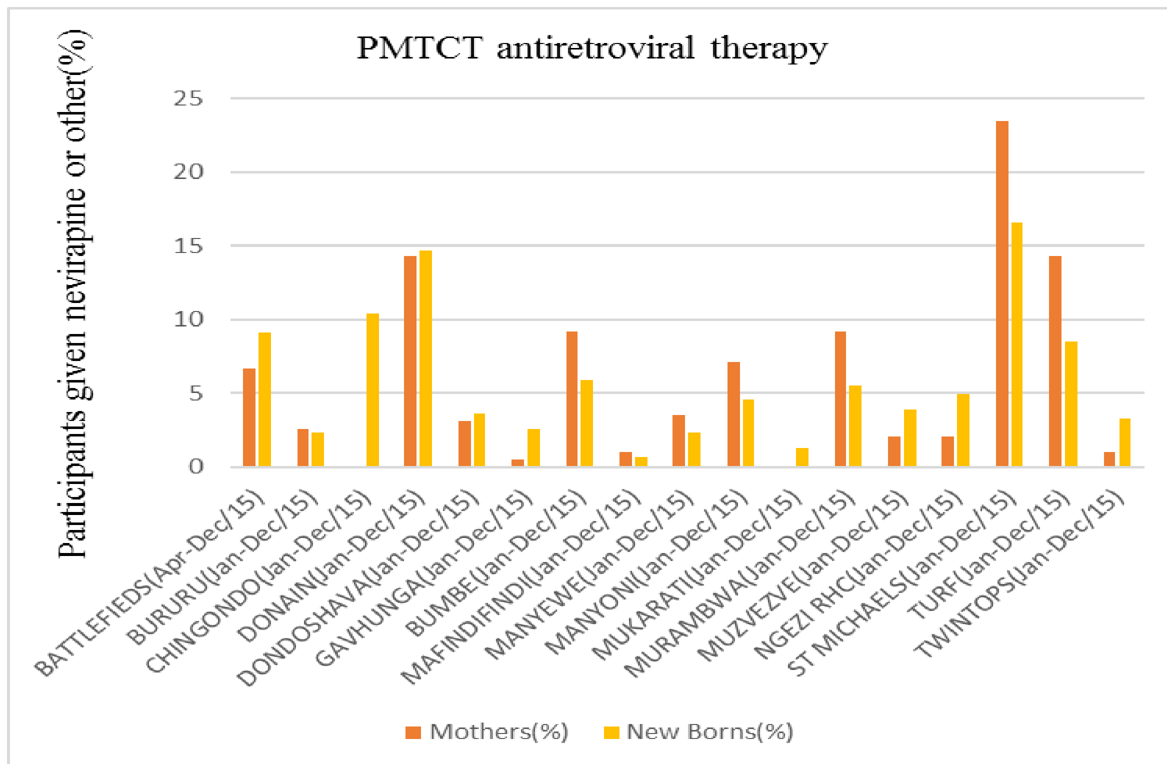


Figure 3.12: Prevention of Mother to Child Transmission antiretroviral therapy for Mhondoro-Ngezi District Jan-Dec 2015

N=334

This section presented and discussed institutional and home deliveries, HIV status at delivery and statistics on HIV prophylaxis. Generally, the results of this study revealed that institutional deliveries were very high in the district. In addition, there were some women in the district whose HIV status were not known at delivery but allowed their babies to be tested and be given prophylaxis.

3.5 Description of postnatal care utilisation

Zamawe, Masache and Dube (2015:587) observed that the postpartum is the riskiest period for both mothers and newborn babies. Hence, postnatal care is essential for identifying and attending to the postpartum complications (Bhattacherjee, Datta, Saha & Chakraborty, 2013:81).

3.5.1 Postnatal visits

The WHO (2013:3) guidelines on postnatal care of women and newborns during six weeks after birth in poor resource settings like Zimbabwe, recommends facility based care for at least 24 hours after birth, first postnatal care at a facility at least as early as 24 hours of birth for home deliveries and additional contacts on day 3 (48-72 hours), between 7 to 14 days after birth and at 6 weeks after birth. The existing data capturing sheet used nationally

does not separate the statistics of the mother and the baby hence the results in this study represent the attendances of both the women and babies for postnatal review.

Of the 5397 women who attended day 3, day 7 and week 6 postnatal visit, 1952 (36.2%) attended day 3 visit, 1846 (34.2%) attended day 7 visit and 1599 (29.6%) attended week 6 visit (Figure 3.12). The descriptive statistical analysis showed that on average, 115 women (sd=56.2) had postnatal visit at day three post delivery per clinic in Mhondoro-Ngezi district. At day seven, an average 109 women (sd=53.2) had postnatal visit per clinic and an average of 94 women (sd=48.5) had postnatal visit at six weeks after delivery. The results show that as the postnatal period weans off, the number of women returning for postnatal visit dwindles. In the focus group discussions in the same study, participants reported that women do not return for postnatal visit because of the long time spent while waiting to be served.

The results demonstrate that a considerable proportion of the postnatal women in Mhondoro-Ngezi district received fewer postnatal care compared to those at national level, where the results of two years preceding the survey showed that 57% postnatal women received postnatal care in the first two days after delivery (ZIMSTAT & ICF International 2015:141). However, the results of this study are consistent with findings from Nigeria (Dahiru & Oche, 2015:6) where poor (28.9%) postnatal attendances were reported. In Darjeeling district in India, the reason cited for poor follow-up pre and post delivery was that women were not aware that they should attend return visits (Bhattacherjee, Datta, Saha & Chakrabort, 2013:80). Figure 3.13 illustrates the figures for postnatal care visits for Mhondoro-Ngezi District from January to December 2015.

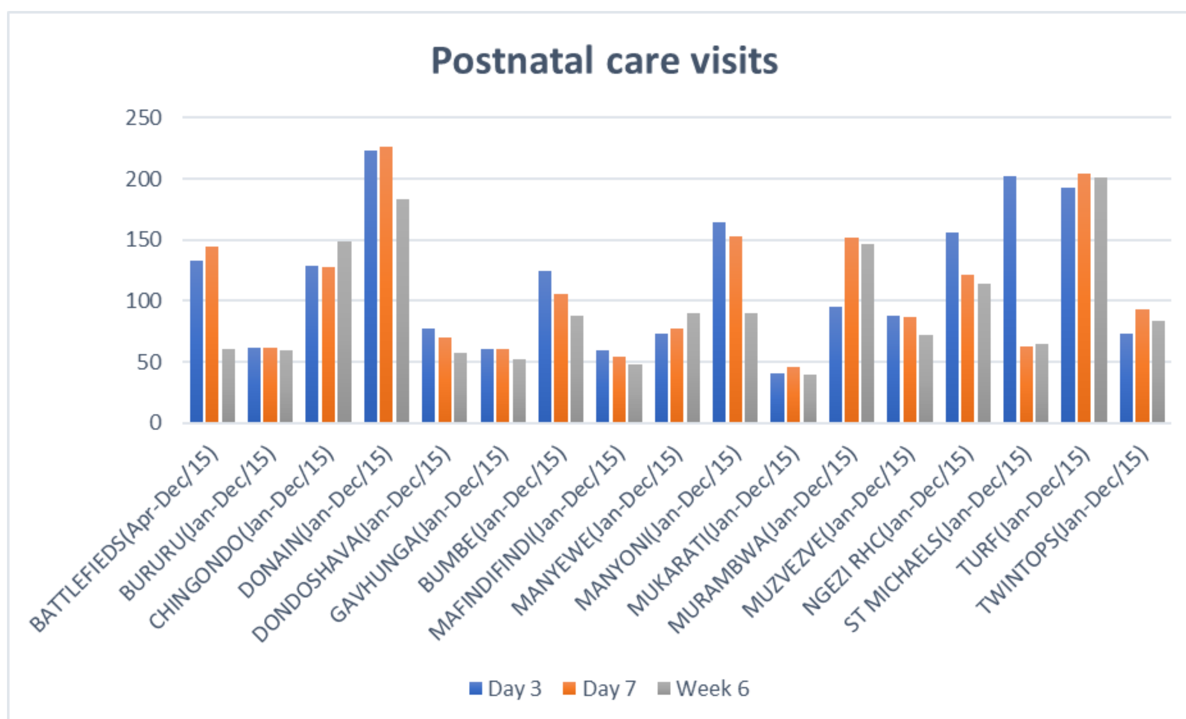


Figure 3.13: Postnatal care visits for Mhondoro-Ngezi District Jan-Dec 2015

N=5397

3.5.2 Vitamin A supplementation during the postnatal period

Vitamin A supplementation during the postnatal period is important for visual health, immune function and physical growth and development (WHO, 2013:3). In Zimbabwe, Vitamin A is given to mothers after delivery to increase Vitamin A content in breast milk. Of the 2509 live deliveries in the district, 2243 (86.6%) received Vitamin A at delivery (Figure 3.14). The descriptive statistical analysis showed that on average, 126 Vitamin A (sd=84.7) supplements were given per clinic in Mhondoro–Ngezi district. Turf clinic had the highest recording with 298 (13.9%) and Mukarakati clinic had the lowest, namely 35 (1.63%). Figure 3.14 shows the figures for Vitamin A supplementation for Mhondoro-Ngezi district from January to December 2015.

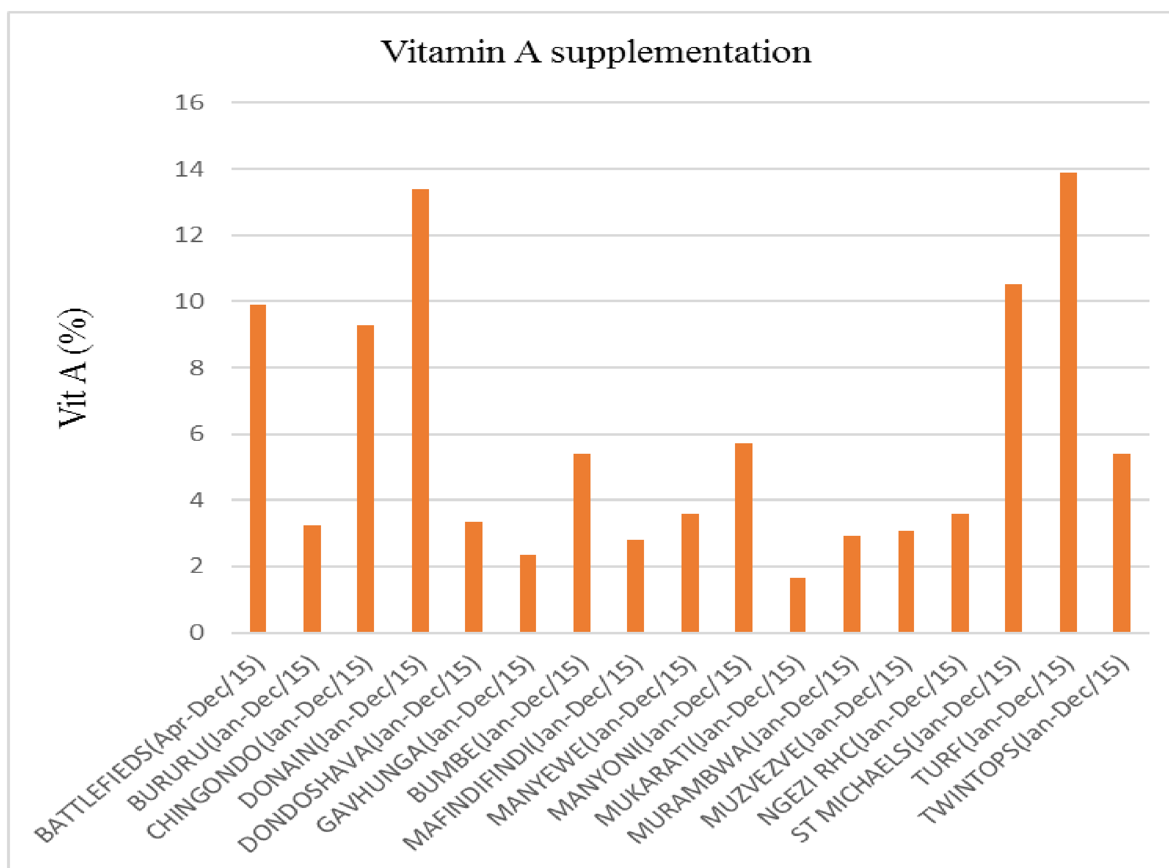


Figure 3.14: Vitamin A supplementation for Mhondoro-Ngezi District Jan-Dec 2015

The results of this study revealed that the majority (78.9%) of pregnant women book their pregnancy late, 87.9% deliver at a health facility and fewer women receive postnatal care in the district. Utilisation of maternal health services is high in the district, except for uptake of HIV prophylaxis among women who have delivered.

To ascertain morbidity and mortality of the whole district, data on transfers out, causes of transfer, maternal deaths and causes were gathered and analysed and these will be presented and discussed next.

3.6 Maternal transfer from clinics to the district and central hospitals

Transfers from the clinics were referred to St. Michaels Mission Hospital and if there were any further complications the patients were referred to Harare Central hospital where better specialised services were available. Transfers from the clinics to St Michaels' Mission district hospital were 13. The district maternal transfers out were followed up to Harare Central Hospital to find out the outcome. Out of the 35 transfers that were recorded to have been transferred to Harare Central Hospital, only 5 were traced in the Central Hospital registers. The probable reasons for having no records of the other patients could be that,

the patients used different names to escape payment of maternity services since maternity care is not free at the central hospitals or they may have sought treatment elsewhere. Harare Central hospital records showed that 39 patients were transferred for further management from the district to Harare Central hospital.

The three major reasons for transfer in the district were slow progress of labour, 7 (15.2%), previous caesarean section, 7 (15.2%) and foetal distress, 6 (13.0%). Some patients who were transferred had more than one problem. Of the 39 patients who were transferred from the district, 3 (7.7%) died at the central hospital and of those who died, two had live births and one died in utero and was delivered during post mortem. Further analysis of the transfers showed that 3 (7.7%) had stillbirths, 11 (28.2%) had a normal vertex delivery, 25 (64.1%) were delivered through caesarean section and 2 (5.1%) women were treated and discharged. Reasons for patient transfer out are indicated in Table 3.1.

Table 3.1: Reasons for patients transfer to Harare Central Hospital in Mhondoro-Ngezi district Jan-Dec 2015

N=46 (n≥N because some patients had more than one problem)

Reason for transfer	Frequency (n)	Percentage (%)
Cord and arm prolapsed	1	2.2
Abnormal lie	3	6.5
Multiple pregnancy	3	6.5
Cephalo-pelvic disproportion (CPD)	4	8.7
Slow progress	7	15.2
Previous caesarean section	7	15.2
Premature rapture of membranes (PROM)	1	2.2
Rhesus negative	1	2.2
Antepartum haemorrhage (APH)	4	8.7
Eclampsia	3	6.5
Foetal distress	6	13.0
Pregnancy induced hypertension (PIH)	2	4.3
Postpartum haemorrhage (PPH)	1	2.2
Post dates	1	2.2
Draining	1	2.2
Puerperal sepsis	1	2.2
TOTAL	46	100

3.7 Maternal mortality rates

Maternal mortality is an indication of the country's health status. Table 3.2 shows maternal deaths for Mhondoro-Ngezi district during the year 2015. Four maternal deaths were recorded in the district in 2015 and of these, one (25%) was of a mother older than 24 years recorded at Bumbe Clinic. Three (75%) other maternal deaths were of women transferred to Harare Central Hospital from the district. Of these three maternal deaths, one was from Murambwa Clinic and two were from St. Michaels Mission Hospital. No record or minutes of

maternal mortality audit meetings could be located for all the deaths although health personnel at Harare Central Hospital indicated that the audit meetings were done. All the deaths were due to direct causes, namely postpartum eclampsia and puerperal sepsis. In this study, all the women died due to first delay causes, two during the puerperium and one during the antepartum period, where the women and their families delayed in seeking maternal healthcare services when complications occurred while at home. Nieburg (2012:10) refers to first delay as the delay in deciding to seek care on the part of the individual, the family or both; second delay as the delay in reaching an adequate health facility and third delay as the delay in receiving adequate care at the facility.

Contrary to these results in Pakistan (Shah, Hossain, Shoah, Hussain, Gillani & Khan, 2009:96), the second delay was the most frequent (74%) cause in which most women delayed in arriving at a health facility due to long distance. Table 3.2 presents causes of maternal deaths in Mhondoro-Ngezi district from January to December 2015.

Table 3.2: Causes of maternal deaths in Mhondoro-Ngezi District Jan-Dec 2015 (N=4)

Case	Booking status	Mode of delivery	Foetal outcome	Period of death	Cause of death	Delay
14 years P0 G1	Unbooked	Post mortem Institutional	Still birth	Ante partum	Puerperal sepsis	1st delay
35 years P4 G5 18/40	Unbooked	Normal vertex delivery Institutional	Still birth	Puerperium	Post partum eclampsia	1st delay
35 years Parity and gravidum unknown	Unbooked	Normal vertex delivery Home delivery	Live baby	Post partum	Post partum eclampsia	1st delay
>25 years	Unknown	Normal vertex delivery	Live baby	Puerperium	Puerperal sepsis	1st delay

To ascertain the maternal mortality rate in the district, the following calculations were undertaken:

Mhondoro-Ngezi District Maternal Mortality Rate

Formula: Death recorded/Total live births X 100 000 live births

4/2509 X 100 000 **=159 deaths/100 000 live births**

It is important to note that the maternal mortality rate for the district may not reflect the true picture because some religious groups in the district do not utilise health facilities, hence they may not report maternal deaths that occur. However, the maternal mortality for the district is less than the national mortality which currently stands at 614 per 100 000 live births (ZIMSTAT et al., 2014:179). One plausible reason for this discrepancy could be poor

data capturing as patients transferred outside the district are not well documented and hence following up all of them was a challenge. The other reasons for the low maternal mortality could be due to failure to report maternal deaths that occur outside health facility. However, the low maternal mortality rate in the district is positive as this shows that the high institutional deliveries and prolonged stay in health facility after delivery are paying off. These findings are consistent with a study conducted by Ergano, Getachew and Negash (2012:114) in South Omo pastoral areas of Ethiopia in which maternal mortality was relatively low. The maternal mortality rate in this study is slightly lower than that reported in a study done by Ngomane and Mulaudzi (2010:1) in the Bohlabelo district in Limpopo, South Africa where 180 deaths per 100 000 live births were reported.

3.8 Maternity drug availability

According to the Zimbabwe EDLIZ (2015: xi, 66-87), all medicines are classified according to their priority. The Vital, Essential, and Necessary (VEN) drugs listing classification is used to assist in giving priority to medicines based on economic considerations. The V drugs are drugs or (medical supplies) that are potentially life-saving, or their unavailability would cause serious harm and efforts should always be aimed at making the drugs 100% available. V drugs in maternity include oxytocin injection, oral amoxicillin, benzyl penicillin injection, methyldopa, nifedipine, hydralazine, magnesium sulphate, dexamethasone, misoprostol and oral contraceptives. The E medicines are essential and are given second priority. Without the E drugs there would be major discomfort or irreversible harm. The E drugs in maternity include ferrous sulphate, folic acid, prochlorperazine and pethidine. The N medicines are still necessary but are lower in priority than the V and E medicines. The N medicines in maternity include promethazine, metoclopramide and magnesium triscilicate. The maternity drug availability in the district during 2015 was generally poor. N drugs availability in the district recorded 2781 (28%), V drugs were 1188 (43%) and E drugs were 820 (29%). Unavailability of drugs in government institution is a cause for concern as women cannot afford to buy drugs from private pharmacies. Figure 3.15 shows drug availability in the district.

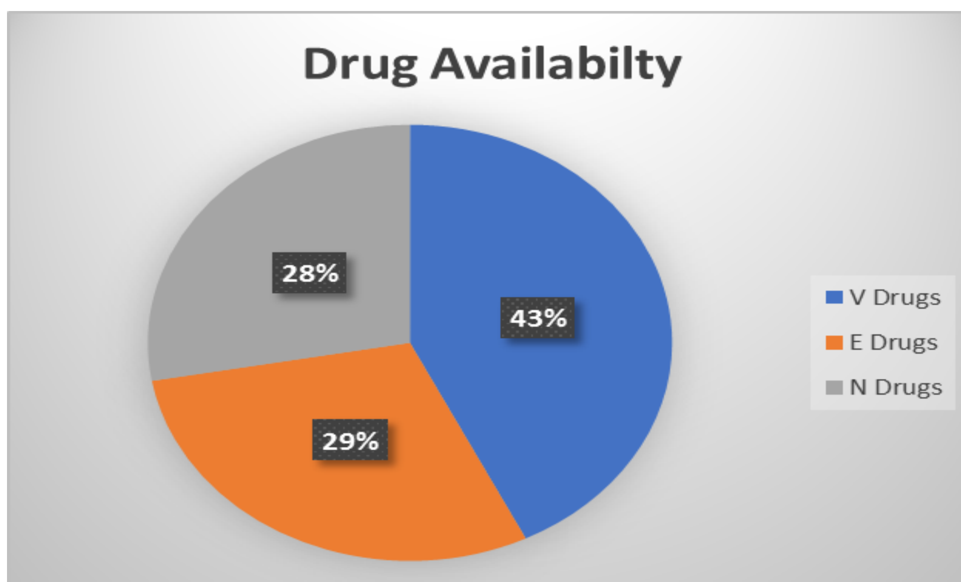


Figure 3.15: Maternal drug availability for Mhondoro-Ngezi District Jan-Dec 2015

Total drugs available (N)=2781 Vital (V)=1188, Essential (E)=820 and Non- essential (N)=773)

This section presented results on maternal healthcare services utilisation and maternal morbidity and mortality for Mhondoro-Ngezi district during the year of 2015. The major findings showed late ANC booking, few repeat contact visits, high institutional deliveries, high uptake of PMTCT services, poor data capturing on transfer outs, low maternal mortality, low postnatal attendances and low vital, essential and necessary drugs availability. The next section will discuss the qualitative findings on maternal healthcare services utilisation. The demographic characteristics of the focus group participants will be presented first followed by the themes that emerged from the analysis of the data generated during the focus group discussions.

3.9 Factors related to utilisation of maternal healthcare services

Qualitative data was collected on maternal healthcare services utilisation using focus group discussions with purposively selected maternal healthcare providers, community members and postnatal women. The objective for collecting qualitative data was to explore and describe maternal healthcare services utilisation in Mhondoro-Ngezi district. The qualitative findings gave answers to the first research question which was: 'What socio-cultural, economic, religious and operational factors influence utization of maternal health care services in Mhondoro-Ngezi district in rural Mashonaland West Province, Zimbabwe?' A better understanding of factors that influence utilisation of maternal healthcare services was

required so that context specific initiatives could be developed for enhancing utilisation of maternal healthcare services.

Three focus group discussions were conducted over two days at St Michaels Mission Hospital and Murambwa clinic. St. Michaels Mission Hospital was the study site. The rationale for including Murambwa Clinic for data generation was because it was difficult to recruit postnatal women for the focus group discussion at St. Michaels Mission Hospital. The reason for having few postnatal women at the hospital could be because postnatal women are attended to at primary level in areas where they reside and only women with complications are referred to St. Michaels Mission Hospital. Challenges were also faced in recruiting maternal healthcare providers at St Michaels Mission Hospital because few village health workers came for recruitment. After discussing these challenges with the supervisors, a focus group discussion with maternal healthcare providers was also conducted at Murambwa Clinic.

The findings from the focus group discussions describe various factors relating to utilisation of maternal healthcare services during antenatal, intrapartum and postnatal periods. The factors were categorised into the following four themes; utilisation of available resources and maternal healthcare services; barriers to maternal healthcare services utilisation; enablers to utilisation of maternal healthcare services and cultural and religious beliefs and practices women were expected to conform to, to ensure they deliver a healthy baby. These themes will be presented with their sub themes after the demographic characteristics of the participants. A table will be presented first under each theme followed by excerpts from the group discussions. Literature will be included in the discussions.

3.9.1 Characteristics of the focus group discussion participants

Three focus group discussions were conducted in September 2016 at St. Michaels Mission Hospital and Murambwa Clinic with purposively selected community members, maternal healthcare providers and postnatal women respectively. Each group consisted of five to eight participants and lasted between 60-90 minutes. Maternal healthcare providers' demographic characteristics will be presented first.

- **Maternal healthcare providers' demographic characteristics**

In this study, maternal healthcare providers consisted of midwives and village health workers. Although the researcher wanted traditional birth attendants to be part of the focus group discussions, none were available for recruitment. The focus group discussion with maternal healthcare providers lasted 50 minutes and was undertaken at Murambwa Clinic in a secluded room away from day to day activities at the clinic. The group consisted of two

nurses and six female village health workers. Of the two nurses, one was a male midwife nurse with 14 years experience working as a General Nurse and two years as a midwife. The other nurse was a Primary Care female nurse with three years experience. The Primary Care nurse had undergone a six months post midwifery course to allow her to work as a maternity nurse. Five of the village health workers were educated up to primary level and only one was educated up to secondary level (Form 4). All the participants had children. The maternal healthcare providers were all Christians and belonged to different denominations. Table 3.3 shows the maternal healthcare providers' demographic characteristics.

Table 3.3: Maternal healthcare providers' characteristics

MHCP number	Age	Gender	Marital Status	Level of Education	Profession	Religion	No of Children
1	59	Female	Widow	Grade 7	Village health worker	Methodist	7
2	37	Female	Married	Form 4	Village health worker	Methodist	3
3	34	Female	Married	Form 4	Primary Care Nurse, Three years midwifery experience	Anglican	2
4	53	Female	Married	Grade 7	Village health worker	Johane Masowe Apostolic	7
5	53	Female	Widow	Grade 7	Village health worker	Salvation Army	5
6	63	Female	Married	Grade 7	Village health worker	Methodist	3
7	43	Male	Married	Form 4	Registered General Nurse, State Certified Midwife	Roman Catholic	3
8	50	Female	Widow	Grade 7	Village health worker	Anglican	4

- **Postnatal women's demographic characteristics**

Postnatal women were purposively selected at Murambwa Clinic from women who had come to seek postnatal services. All five postnatal women were within the six weeks postnatal period. The discussion took 47 minutes. The age range for postnatal women ranged from 17 to 28 years. Only one participant was single and had one child. All the participants were educated up to secondary level. None of them was employed. All the participants had children, with most of them having only one child. Four of the postnatal

women belonged to different apostolic churches with only one woman not belonging to any denomination. Table 3.4 shows the demographic characteristics of postnatal women.

Table 3.4: Postnatal women's demographic characteristics

PNW number	Age	Gender	Marital status	Level of education	Profession	Religion	No of children
1	17	Female	Married	Form 3	House wife	Apostolic	1
2	28	Female	Single	Form 4	Unemployed	Apostolic Faith Mission	1
3	25	Female	Married	Form 3	House wife	Johane Masowe Apostolic	3
4	19	Female	Married	Form 4	House wife	Apostolic Faith Mission	1
5	20	Female	Married	Form 4	House wife	None	1

- **Community members' demographic characteristics**

A focus group discussion with eight purposively selected community members was conducted at St. Michaels Mission Hospital in September 2016. The discussion was conducted in a secluded room and lasted 68 minutes. Most of the participants were men with only two participants being women. Five of the participants were married, one single and the other one was divorced. Most of the community members were educated up to secondary level. Only two were educated up to primary level (Grade 7). Among the community members, there was a former teacher and a headman. Table 3.5 shows the demographic characteristics of community members.

Table 3.5: Community members' demographic characteristics

CM number	Age	Gender	Marital status	Level of education	Profession	Religion	No of children
1	50	Male	Married	Form 4	Community member	Anglican	4
2	74	Male	Married	Grade 7	Community member Teacher	Roman Catholic	7
3	72	Male	Married	Grade 7	Community member Headman	Christian	5
4	51	Male	Divorced	Form 4	Community member	Methodist	2
5	32	Female	Married	Form 4	Community member	Anglican	4
6	35	Male	Married	Form 4	Community member	Apostle	2
7	45	Male	Married	Form 3	Community member	Apostle	5
8	55	Female	Single	Form 4	Community member	Christian	3

3.10 Barriers to use of available resources and maternal healthcare services

The study findings indicate that pregnant women experience six categories of barriers to utilisation of maternal healthcare services during antenatal, delivery and postnatal period.

These include healthcare system related, maternal healthcare user related, support system related, culture related and religious related barriers. Each category in turn has its own sub-themes that will be discussed in this section. Table 3.6 shows a summary of the barriers to utilisation of maternal healthcare services.

Table 3.6: Barriers to utilisation of available resources and maternal healthcare

Barriers	Antenatal	Intrapartum	Postnatal
Healthcare system related	Health personnel attitude	Health personnel attitude	Health personnel attitude
	Long waiting times		Long waiting times
	Incidental costs and perceived user fees	Incidental costs and perceived user fees	
		Distance to health facility and transport problems	Distance to health facility and transport problems
	Presence of male midwives	Presence of male midwives	Presence of male midwives
	Shortage of resources at healthcare facilities	Shortage of resources at healthcare facilities	
		Transfer process between hospitals	
			Disregard for indigenous health practices
Maternal healthcare user related	Lack of knowledge	Lack of knowledge	Lack of knowledge
	Fear of HIV testing	Fear of staying at the hospital longer	
	Reluctance to book for ANC and to attend more ANC contact visits		
	Maternal healthcare user attitude		
	Age and experience	Age and experience	
		Physical factors (pain and fast labour)	Physical factors (pain)
	Other responsibilities		Other responsibilities
	More trust in help provided in the community		
Support system related	Lack of spousal support and involvement	Lack of spousal support and involvement	Lack of spousal support and involvement
	Partner not at home	Partner not at home	Partner not at home
		Presence of traditional leaders/ elderly women/relatives	
		Lack of community support	
Culture related	Use of herbs	Use of herbs	Use of herbs
	Cultural beliefs and norms		Cultural beliefs and norms
Religion related	Fear of mystic forces		Fear of mystic forces/

			witchcraft
	Religious healing practices		

3.10.1 Maternal healthcare system related barriers

The World Health Organisation (2017:1) defines maternal health as the health of women during pregnancy, childbirth and postpartum period. Burazeri and Kragelj (2013:4-5) state that healthcare consists of measures, activities and procedures for maintaining and improving health and living and working environment with the purpose to promote, restore and maintain health. In this study, health personnel attitudes, long waiting time, incidental costs, perceived user fees, poor service and care, distance to health facility, presence of male nurse, transport problems, inadequate resources, number of antenatal care services and disregard for indigenous health practices were the healthcare system related barriers that emerged from the analysed data from the focus group discussions. Table 3.7 summarises the barriers.

Table 3.7: Maternal healthcare system related barriers

Antenatal	**Intrapartum**	**Postnatal**
Health personnel attitude	Health personnel attitude	Health personnel attitude
Long waiting times		Long waiting times
Incidental costs and perceived user fees	Incidental costs and perceived user fees	
	Distance to health facility and transport problems	Distance to health facility and transport problems
Presence of male midwives	Presence of male midwives	Presence of male midwives
Shortage of resources at healthcare facilities	Shortage of resources at healthcare facilities	
	Transfer process between hospitals	
		Disregard for indigenous health practices

3.10.1.1 Health personnel attitude

In Mhondoro-Ngezi, maternal healthcare services are offered by trained midwives. The roles of a midwife in promoting the health of women and childbearing families are multifaceted. International Confederation of Midwives (ICM) Essential Competencies for Basic Midwifery Practice (2010:2) identified the roles of a midwife as partnership with women to promote self-care and health of others, infants and families, respect for human dignity, advocacy for women and cultural sensitivity. The midwife is expected to have a positive attitude towards pregnant women during pregnancy, delivery and after delivery.

Hogg and Vaughan (2005:150) define an attitude as a relatively enduring organization of beliefs, feelings and behavioural tendencies towards socially significant objects, groups or events or symbols. Despite an increase in programs to improve the attitudes of nurses and midwives in most health facilities worldwide, literature reports of women complaining of negative attitudes displayed towards women during pregnancy and delivery. Unfriendly health personnel attitude creates fear in women and helplessness as evidenced by the following extracts:

CM 5: *Others [women] are afraid of nurses' attitudes. Because when they arrive an individual nurse may shout at them. Some nurses are not patient with people.*

MHCP 7: *Maybe it could be that the patient does not like the nurse's character but also it can also be the nurse's attitude. It could be our attitudes, us workers here that chase away patients. What happens is that usually when women get back home they say I was treated roughly when I was being delivered by nurse so and so. That will plant a bad seed in people. They will say that if at hospital nurse so and so is there one will be treated roughly. So women will not come.*

Based on these findings, it is clear that women are afraid of being scolded and shouted at. Adeyemo, Oyadiran, Ijedimma, Akinlabi and Adewale (2014:2) observed that, because health personnel do not respect the views of the woman and her significant others, provision of quality care is compromised. Evidence that nurses' attitudes affect utilisation of maternal healthcare services also came from studies done in Ghana (Ganle, Parker, Firztpatrick & Otupiri, 2014:1) and South Africa (Tsawe & Susuman, 2014:6; Ngomane & Mulaudzi, 2010:5). In Nigeria Adeyemo, Oyadiramo, Ijedimma, Akinlabi and Adiwale (2014:6) reported that positive nurse attitude elicited a positive effect on women resulting in good outcomes. Problems associated with negative health personnel attitudes were cited by Mannava, Durrant, Fisher and Luchters (2015:2) as an increase in maternal and neonatal morbidity and mortality with some occurring because of home deliveries as women stop using health facilities. There is need to reorient nurses on creating a mutual relationship with the birthing women. In addition, training of health personnel is advocated for targeting change in attitudes and adoption of professional behaviour.

In this study, poor quality of care experienced from the nurses was attributed to the negative birth outcomes. Community members narrated how a lack of communication leaves community members with unanswered questions regarding the outcome of the health care:

CM 5: *We ask for help in issues to do with miscarriage. There are a lot of women we see who have had a miscarriage and end up ill and some of them die. We don't know whether you people from hospital on issues to do with miscarriage can tell us of ways you can assist us so that the person is looked after so that they return to their normal health. Most of them return from hospital looking ill. At times you hear that a person delivered and at times you don't understand what happens. At times even myself as the husband I am not told what happened. Sometimes one is told that your wife failed. It ends like that. I don't know where to go after that.*

CM 7: *The same issue that you are talking about, I also had an experience like that. The person who is not well shouts for help no one comes. Another one had a cord and could not have help. We buried the baby because the nurse came late. The mother did not die***.**

CM 5: *Sometimes they will be asleep in a room. Even when you say, 'Yo-whee, yo-whee' there is no response. Sometimes the nurse comes and say, 'You are now bothering me.' Then the nurse realises that things have gone bad. The baby might have a cord around the neck and dies. Like what the elderly gentleman said. But because of lack of knowledge, reporting someone who has their own education, one will lose a lot of money in transport and lawyers. Because of that, nurses surely should make sure that the one who is on duty should put all effort and love.*

Tsawe and Susuman (2014:9) comment that healthcare use is determined by the way in which health professionals treat their patients. The above narrations point to a deteriorating health delivery system. This could be compounded by lack of experienced nurses who act as role models and mentors to newly qualified staff. The findings from this study are consistent with findings from Ghana (Ganle, Parker, Firztpatrick & Otupiri, 2014:1) and Malawi (Zamawe, Banda & Dube, 2015:591) and India (Bhattacherjee, Datta & Chakraborty, 2013:82) where women complained of poor quality of care. In a study conducted in Tanzania by Mselle, Moland, Mvungi, Evjen-Olsen and Kohi (2013:5), women reported that progress of labour was not monitored by nurses and patients were left alone most of the time in labour. Contrary to these findings, the majority (91.6%) of women in a study done in Nigeria by Obiageli, Ugochukwa, Ukegbu, Chigozie, Ifeadike and Okezia **(**2014:154), expressed satisfaction with maternal health services during their last encounter with health delivery system.

There were perceptions that some nurses were not motivated to do their work as indicated by the following:

CM 7: *Nurses who deliver babies should have a lot of love towards their job. No matter that they are not getting their salaries on time. These things need a lot of love. Lots of love. It is a difficult moment. They should also remember that they also had the same experiences. They should give more importance to the moment.*

PNW 5: *Another point is that when they come to work they should concentrate on work and not socialise.*

CM 7: *Plus at times when you come to hospital, the go slow that people sometimes encounter when they come causes people who come to hospital to lose interest.*

Staff motivation is a cornerstone to the provision of quality care. There is need for authorities to look for strategies to motivate health personnel in Mhondoro-Ngezi district. While health personnel in this study were reportedly demotivated due to non-payment of salaries, in Tanzania Mselle, Molland, Mvungi, Evjen-Olsen and Kohi (2013:3) reported that staff lacked motivation due to shortage of resources and lack of recognition by supervisors.

3.10.1.2 Long waiting times

Waiting time is the amount of time an individual wait at a facility before care is rendered. Long waiting times before care is rendered leads to a decline in the number of women seeking maternal healthcare services. In addition, women may not see the need for returning in future. The participants in this study expressed displeasure at the time spent by women at the facilities while seeking services. The participants reported that women are asked to wait until they are many before they are serviced despite having come to the clinic early. Below are some of the views from the participants regarding time spent at the clinic:

PNW 3: *The problem is one comes early to clinic, but one leaves the clinic around past two, at times even past four. That is the problem women encounter here. One becomes hesitant to come to hospital because you will spend the whole day there. That is what usually happens. People talk about it a lot.*

CM 3: *Also, what happens is when people come in the morning they are told to wait until they are more people. This is frustrating to people. Most of the time people spent the whole day here waiting for others to come. People do not come because of that.*

PNW 1: …*women usually say today I am not going to scale because even if I go there early I come back at six in the evening. Others will end up delivering before they come here*.

PNW 2: *I think the problem we mentioned should be addressed. Pregnant women are complaining that they leave the clinic late. Pregnant women should be seen first, followed*

by women with children. They will come because they will be assured that when they come to clinic early they will also go back home early. I see as if that is what can encourage women to come to clinic.

PNW 5*:* *People say when we go to the clinic we do not come back on time. Like right now we came here in the morning. People are delayed when they come here. Most of the time that is the problem. The nurses should attend to people as they come so that we return home early and they should not wait to attend to us until we are many. So, when one thinks of coming here, will say, spending the whole day again? If only they tell us, then you know that you will spend the whole day here.*

The same sentiments raised in this study were expressed by participants in studies in India (Bhattacherjee, Datta, Saha & Chakraborty, 2013:82), South Africa (Tsawe & Susuman, 2014:6), Nigeria (Okonofua, Ogu, Agholor, Okike, Abdus-salam, Gana, Randawa, Abe, Durodola & Galadanci, 2017:2) and Ghana (Ganle, Parker, Firztpatrick & Otupiri, 2014:1) where participants attributed poor utilisation of services to long waiting times. In Malawi, Zamawe, Masache and Dube (2015:591) reported that women did not return for postnatal care because postnatal women were not prioritised. Contrary to the above findings, Mason et al (2015:5) reported that women in their study in Western Kenya reported that they received care in good time and did not spend longer time at the clinic.

3.10.1.3 Incidental costs and perceived user fees

User fees refer to payment made at the point of service with no risk sharing (WHO, 2017:1). Largade and Palmer (2017:839) also add that user fees can entail any combination of drug costs, supply and medical material costs, entrance fees or consultation fees. The findings from this study noted that maternity fees were the reasons women delayed or failed completely to book for antenatal care. Poverty and economic disadvantage have been cited as a barrier to utilisation of maternal healthcare services in Zimbabwe especially when there are direct and indirect costs (EGPAF, 2009:10). User fees have been cited as an impediment to utilisation of maternal healthcare services in developing countries. In Zimbabwe, there has been a policy shift and maternity services in rural communities are free. However, there are other incidental costs like drugs and sundries that might be out of stock in public clinics and hospitals which the patients are required to buy at private pharmacies. Findings from this study indicated that women were not using health facilities because they did not know that maternity services were free. The following excerpts reflect the participants' differing views on user fees:

CM 1: *Those who are not coming it is because of the difficulties faced by women on maternity. I have a neighbour she nearly died at home. When she wanted to go to the clinic*

she was afraid that booking and others money is needed for that and she did not have. I see that the problem is there because money is too much for women's maternity.

CM 7: *The other issue is that, the fees that are needed at the hospital, people cannot afford.*

CM 2: There is *no money among people in this community.*

MHCP 7: *They should come early to book pregnancies because it is for free. They do not pay. These are the messages that we should tell them. Some of them think that they should look for money.*

CM 8: *This issue about money. At hospital right now, women who are pregnant are not paying. Even family planning they are not paying. Also, children who are zero to 5 years are not paying. The issue about money that you are talking about maybe about money for transport if one is far away from the hospital. No, we cannot say that a pregnant woman is asked to pay. No that is not so.*

The findings from this study are consistent with findings from South Africa (Ngomane et al, 2010:5) where, although primary healthcare is free, women still face challenges in accessing health facilities due to transport costs. In Nicaragua, indirect costs were reported to be a barrier in utilisation of maternal healthcare services in a country where maternal services are free (Lubbock & Stephenson, 2008:77). Indirect costs such as payment for bedding, transport costs, food, drugs and other costs were some of the constraints that hindered women in Darjeeling, India from utilising maternal healthcare services (Bhattacherjee, Datta, Saha & Chakraborty, 2013:83).

Poor utilisation of maternal healthcare services due to costs has also been cited in India, where women opted for home deliveries citing high expenses at hospitals (Bhattacherjee, Datta, Saha & Chakraborty, 2013:81). However, in Ghana, despite free maternity services, women were not accessing healthcare services because they felt they were losing control over their healthcare to modern medicine (Ganley et al, 2014:13).

From the above discussions, there is a need for creating awareness among community members on the government policy of non- payment of maternity care in rural areas as a strategy to encourage more women to utilise maternal healthcare services.

3.10.1.4 Distance to health facility and transport problems

Women seeking maternal healthcare services often face a lot of challenges, one of which is the issue of having to travel long distances. This is more difficult when one is in labour,

especially if labour starts during the night when means of getting transport are impossible. In this study, long distance to a health facility might mean a patient might have to travel the whole day to reach a health facility. The long distance to the health facility is confirmed by the following statements from the participants:

CM 2: *Some areas are far away from the hospital. The problem is there are no ambulances to take people.*

CM 7: *Our hospitals are far apart and because of that no transport reaches there*.

PNW 1: *Those who are far do not come. It is difficult for them to walk. They end up delivering at home.*

MHCP 7: *Here at Murambwa clinic we do not have a waiting home…. If we get that it will be a new thing that we think if they put it here all those whom we said have problems of travelling 30 kilometers away, they can come and stay here. They will not be any barrier. Those who find the river full and there is no boat available would come during daytime and stay at the mothers' waiting home.*

Distance from health facility was also cited in a study conducted in Nigeria where women reported that they travelled more than 10 km to the next health facility and this hindered them from accessing maternal healthcare services (Shamaki, Yew & Dahiru, 2017:301). In Uganda, incomplete ANC visits and late booking were attributed to long distance from a health facility (Kawungezi et al, 2015:139). Ngoman and Mulaudzi (2010:5) also reported that women in South Africa deliver at home due to long distance from a health facility. In India, 43.5% of the participants reported that health facilities were too far from their residence resulting in most women opting for home deliveries (Bhattacherjee, Datta, Saha & Chakraborty, 2013:81).

Poor road network, terrain and community-based transport were cited as barriers to utilisation of maternal healthcare services. The participants' views on infrastructure are expressed in the following quotes:

CM 1*: Others will not have transport to come back. Others do not have ox or donkeys.*

MHCP 7*: We also have geographical barrier that is from the south, the side from Seke. We have a river called Mudezi, where a dam was constructed. It can only be crossed using a boat. There is no other way. There are school children who come here with the boat and even mothers who come to the clinic with their new born or when in labour use it. If there is an emergency at night you might get the boat but there will not be anyone to assist you. Or*

you may find that all the boats have crossed and are at the other end. We encounter such problems

The Mhondoro-Ngezi Annual Report (2015:4) notes that there was no means of communication at the district hospital due to absence of a telephone. This implies that women across the district in need of ambulance services could not contact the hospital for transport. These findings contribute to second delay in seeking maternal healthcare services. Poor infrastructure has also been cited as a barrier in maternal healthcare utilisation in the Eastern Cape, South Africa (Alabi, O'Mahony, Wright, Mohlomi & Ntsaba, 2015:6), rural Ethiopia (Okwaraji, Webb & Edmond, 2015:2) and Uganda (Rutaremwa, 2015:6).

To avert disruption in communication networks and subsequent adverse outcomes, the district hospital had adopted use of mobile smart phones as a means of communicating with other health facilities in and out of the district. Unfortunately, ordinary community members had no access to the mobile numbers.

Challenges in securing transportation when an obstetric complication arises contribute to delays in timely interventions too. The study highlighted the perennial absence of ambulances in the district. Where ambulances are not available, women find their own alternative transport in the community, in the form of ox or donkey drawn carts. The South African Ministry of Transport (2007:2) acknowledges that use of animals has its roots in the evolution of human beings and the uses range from moving people, carrying goods to drawing of agricultural implements. These modes of transport were reported by participants not to be readily available. The following excerpts are a testimony of the participants' views:

CM 4: *The problem is there are no ambulances to take people to hospital.*

CM 7: *Our hospitals are far apart and because of that no transport reaches there.*

PNW 6: *Others will not have transport to come back. Others do not have ox or donkeys. So for them to walk they will be in pain.*

PNW 2: *At times you will be staying far away from the clinic. Like you are coming from Nherera there and you will be pregnant and for you to walk it will be a problem. You might not be able to walk to the clinic. Sometimes you may not have cattle to take you to the clinic.*

CM 5: *These ambulances should not kill people with their charges. We beg you. If one is asked to pay $60, $80 eeh it is too much. Where will one get the money, the country is facing some problems.*

MHCP 7: *…there are some people who stay in areas where there is no access to cars or kombis. Transport is a problem. I think it is about 40 kilometres from here. So even if we share the boundary centrally, it will be 20 kilometres to the north. Coming from the east from Harare, where you turned in Masvingo road, I think about 40 kilometers, there is no clinic from there to here. From Beatrice, I should say, there is no clinic all the way. So if they do not have a cart (ngoro) or a car they have a problem to reach the clinic here. So we can say some delays are caused by transport problems. Common modes of transport here are carts, donkeys and cows.*

CM 5: *Long time ago when the country was still stable we used to have ambulances that would come on time to collect women who were in labour. They would come and take the person and rush with them to hospital. We wish that could be revived. It is not all of us that have carts. It is not all of us who have cattle. I think you heard that there are some areas that are far away. It is better that if the hospital collects that person and goes with the person, like what happens in Harare where we hear that ambulances are taking people from home. That is good. This is a request we are putting forward.*

The findings from this study suggested that the women's intentions to use maternal healthcare services were impeded by unavailability of transport in the district. Consistent with these findings, studies in rural Ethiopia (Bedford, Ghandi, Gimma & Adamassu, 2012:5), Malawi (Zamawe, Banda & Dube, 2015:590) and Uganda (Kawungeza et al, 2015:135) reported that women walked, rode a horse or donkey or were carried on a stretcher when they wanted to access maternal healthcare services. In Nicaragua, women failed to utilise maternal healthcare services due to unavailability of transport (Lubbock & Stephenson, 2008:79). From the above studies one can see that transport problem is not only peculiar to Mhondoro–Ngezi district, but it is a worldwide problem that needs urgent attention. Interventions aimed at facilitating access to maternal healthcare services should therefore, be implemented with full community and stakeholders' involvement.

3.10.1.5 Presence of male midwives

The gender role stereotyping of the nursing profession has seen many women reluctant to be served by men. In this study, postnatal women expressed anxiety and discomfort in being examined by a male midwife specifically during postnatal period. Tales shared by women in the community reinforce the anxiety women face when the male midwife wants to

examine them. The following statements were made regarding examination by male midwives:

PNW 5: *To tell you the truth, I did not want to come to clinic to book because I was told that when I come here they will touch my abdomen. I was afraid that when I come here Mr (name mentioned) will touch my abdomen (others laugh).*

PNW 2: *I want to support that. Others say you are asked to remove your pant so that he can check your private parts.*

PNW 3*: What causes women to be shy, during the three days and six weeks visits is that the nurses want to check whether the stitches are dry. We all know that when one is delivering you know what will be happening down there. But when one has delivered, and they say bring the baby for review, it is no longer proper to have him check down there. It is no longer okay. Most of the times that is the reason why women do not come for check up.*

PNW 1*: When the male nurse (sekuru) is there you cannot be still. You touch this and that especially when he asks you to take off your pants. You try to find something else to do. True, it is difficult.*

PNW 5: *Yes. I was afraid they will touch my abdomen as they try to check the baby's position. I did not want to go there and Mr (name mentioned) to touch my abdomen. I would say I will go when there is sister so and so on duty.*

PNW 2: *That is what women say. He checks there to see if there was anything that was retained. Others do not want that.*

These findings are consistent from findings in some parts of Nigeria where women chose to deliver at home because the culture did not allow a naked woman to be seen by any other man beside her husband (Folashade, Okeshola & Sadiq, 2013:79). Similarily, parturient women in a study conducted in Eastern Cape in South Africa by Alabi, 0'Mahony, Wright & Ntsaba, 2015:5) reported that they did not like to be examined by a male nurse or a male doctor. Bwalya, Kolala, Mazyopa, Mofya and Ngoma (2015:47) observe that culturally and traditionally, men are not allowed to see other men's wives naked regardless of the situation. The findings in this study also mirror results in South Korea where the participants had very strong conservative tendencies towards male midwives (Kim, Kim & Sohn, 2017:227). In Zambia, the number of institutional deliveries decreased when male midwives were deployed in maternal units (Sialubanje, Massar, Davidson, Hamer & Robert, 2015:7). Contrary to the above assertion, women in a study conducted by Kululanga, Sundby, Chirwa, Malata and Maluwa (2012:5) in Malawi, did not mind being attended to by male

midwives. They pointed out that male midwives treated them with respect and dignity and did not talk of what happened in labour and delivery ward.

These findings have an important implication to reproductive health policy makers. When deploying nurses in rural areas they should consider the cultural context in which the male nurses will be working. Women's preferred service provider during pregnancy, delivery and after delivery should be respected. Faced with these new developments in nursing where males are also entering the profession, there is a need to create awareness and instil a positive perception among women regarding presence of male nurses in the profession. At the same time policy makers need to consider the women's views when deploying health personnel in rural areas, where traditions and culture are deeply rooted among community members and decisions to use healthcare services are determined by the dictate of their values and norms.

3.10.1.6 Shortage of resources at healthcare facilities

The findings from this study indicate that there was a shortage of resources such as nurses, doctors, drugs and sundries. Shortage of staff can have serious implications on utilisation of maternal healthcare services and can serve as a barrier to timely and quality care. Despite St. Michaels being a district hospital, where minor surgeries should be performed, the hospital did not have a functional operating theatre as indicated by the following statement:

MHCP 7: *Our hospital is not doing caesarean sections these days. Women end up at Harare Hospital for C- section.*

MHCP 4: *The other reason could be, you might arrive when the person who is supposed to assist is not available.*

CM 2: *What happens to nurses is that the whole night there will be one nurse. So tiredness causes them not to attend to patients. There should be two or three nurses so that they can have turns to rest.*

Consistent with findings from this study, a study conducted in Tanzania by Mselle, Moland, Mvungi, Evjen-Olsen and Kohi (2013:9) revealed that shortage of staff and other resources attributed to poor birth outcomes. In a study conducted in Ethiopia (Austin, Gulema, Belizana, Colaci, Kendall, Tebeka, Hailemariam, Bekele, Tadresse, Berhane & Langer, 2015:5), participants reported lack of trained personnel to respond to emergencies. Unavailability of doctors was also reported in a study conducted in India by Joshi, Mahalingam & Sorte (2016:2175) among postnatal women.

One intervention aimed at improving accessibility to maternal healthcare services is the availability of maternity waiting homes. Penn-Kekana, Pereira, Hussein, Bontogon, Chersich, Munjanja and Portela (2017:1) define maternity waiting home as accommodation located near a health facility where women can stay towards the end of pregnancy and /or after birth to enable timely access to essential childbirth care or care for complications. The Zimbabwe government, with support from its funding partners, introduced maternity waiting homes in all rural district hospitals, mission hospitals and rural hospitals to provide comprehensive emergency obstetric and neonatal care for women who stay far away from health facilities and those with high risk pregnancy. In Mhondoro-Ngezi district, there was only one maternity waiting home situated at St. Michaels Mission Hospital when this study was conducted, which in researcher's opinion is inadequate in servicing the whole district with a total of 4949 expected pregnancies.

The participants also revealed that women's intentions to utilise the maternity waiting home were hindered by shortage of food and lack of information on the duration of stay at the mother's waiting home:

PNW 5: …plus the issue of waiting (kugarira) at the hospital. People are afraid of waiting and may not know the period they will wait before they deliver. And also there is no food, for them to cook for themselves. And searching for food is a problem.

CM 5: *I also want to add that, about waiting at the mothers' waiting home (kumatumba), the problem is that in the community, especially in these rural areas, there is a problem of hesitating to come because of no food. Food is limited among the people here. Very few managed to harvest something, it's here and there. So others will be hesitant because of the food they will eat here. They will look at the food their partner will eat when they go and stay at the mother's waiting home and the food they will be left eating at home and they will see that to be a problem. So they will decide not to come.*

CM 4: *What causes women not to come and stay at the mother's waiting home could be that they might not have money to go and buy food when they come.*

To encourage women to utilise mothers' waiting home, one of the participants suggested:

CM 2: The *hospital should assist with provision of food. The same arrangement that they have with patients in the general wards of providing food to the patientsshould also be done at the mothers' waiting home.*

The findings from this study showed that there was shortage of resources at the maternity waiting home which led most women to prefer staying at home until labour pains had

commenced and were severe. This behaviour usually results in women delivering on the way to a health facility or at home. In addition, lack of communication by healthcare providers on the duration of stay at the maternity waiting home hinders utilisation of the facility. The findings in this study are a cause for concern as evidence suggests that utilisation of maternity waiting homes increased institutional deliveries in other settings like Zambia (Henry, Semrau, Hamer, Vian, Nambao, Mataka & Scot, 2012:7).

The findings of this study are consistent with findings from Nigeria (Sialubanje, Massar, Harner & Ruiter, 2017:12), where women did not use the maternity waiting homes because they did not have money to buy food and other requirements. In rural Zambia, women also complained of lack of food for pregnant women staying at the mothers' waiting homes as food was not provided by health facility authorities (Sialubanje, Massar, Hamer & Ruiter, 2015:9). A qualitative thematic analysis from women in Eritrea, Ethiopia, Ghana, Kenya, Liberia, Malawi, South Africa, Zambia, Zimbabwe, Cuba, Guatemala, Honduras, Nicaragua, Peru, Lao PDR, Nepal and Timor-Leste cited barriers to utilisation of maternity waiting homes as lack of privacy, poor toilet and bathing facilities, poor or inadequate kitchen facilities and non- provision of food (Penn-Kekana, Pereira, Hussein, Bontogon, Chersich, Munjanja & Portela, 2017:9).

The above findings suggest a need for community and public health interventions focusing on the provision of basic amenities at the mothers waiting homes.

3.10.1.7 Transfer process between hospitals

In Zimbabwe, patients are referred from primary level of care (rural health centres) to the secondary level of care (district hospitals) when complications occur until the last level of care, the Central hospitals. In Mhondoro-Ngezi district, all referrals were referred to St. Michaels Mission Hospital for further management. But because there was no resident doctor at the hospital, patients were further transferred from the district hospital to the central hospital in Harare which is about 100 kilometres away. The following quotations illustrate the views of participants regarding the transfer process:

MHCP 6: *A woman arrives at the clinic and maybe she did not book at all. She is examined and maybe her pregnancy needs to go to Harare and here we do not have a car. A car is needed to take the patient to St. Michaels Mission Hospital and there she will be transferred again to Harare Hospital. Yaah she is transferred at St Michaels Mission Hospital, at the clinic, where she came first there was no help given to her and she is transferred.*

CM 5: *Yes or if the person is transferred from here to Harare the person is also charged there. It is also a problem that is causing people to request to go back home with their relatives so that they can die at home.*

Instead of women being transferred straight to central hospitals where specialised care is available, women are referred to the district hospital first, where there are no specialised personnel, further delaying the provision of emergency obstetric care. The findings are consistent with findings from a study conducted by Bedford, Gandhi, Admassu and Girma (2012:5) in rural Ethiopia, where the possibility of onwards referral was a deterrent against health facility utilisation. In another study conducted in Zambia, Sialubanje, Massar, Mamar and Ruiter (2015:9), report that women with complications faced problems during transfer from clinic to district hospital due to transport problems.

The government should find ways of addressing transport problems in rural areas. One such strategy could be the engagement of private ambulance services as suggested by one community member in this study. Alternatively, patients can be transferred directly to central hospitals instead of wasting time passing through the district hospital where there is no specialised care.

3.10.1.8 Disregard for indigenous health practices

The WHO (2015:33) recommends provision of culturally sensitive skilled maternity care as a strategy to ensure every woman and their families have access to skilled care before, during and after birth. The study reported that some healthcare personnel were reported to order women to remove strings tied on the babies or herbs that are put on the babies. These behaviours point to lack of support and understanding of indigenous practices. These practices by nurses could also be deterring women from seeking postnatal care as women believe the nurses would be exposing their babies to illness. It is a cause of concern as nurses seem to fail to incorporate the community's cultural preferences in the maternity service delivery. The following excerpts reflect the nurses' behaviour with regards to indigenous practices:

CM 5: *At the hospital when a child comes with strings tied around them, the strings that the mother was given at her church she is asked by nurses to untie (dambura) the threads.*

***CM 1**: When the child comes with African medicine (mushonga wechibhoyi) smeared on their fontanels the mothers are asked to wipe it off.*

The WHO (2015:35) comments that given that culture is not static, culture dynamics needs to be recognised, anticipated and incorporated into maternity care services. Ngomane and

Mulaudzi (2010:5) observed that a lack of understanding of cultural beliefs and practices results in health systems not supporting and promoting positive indigenous beliefs and practices. Since cultural beliefs and behaviours are difficult to isolate from the social context, WHO (2015:33) recommends health personnel to be culture sensitive and to use a participatory approach in dealing with cultural issues.

This section discussed barriers related to maternal healthcare that affect utilisation of available resources and maternal healthcare services in Mhondoro-Ngezi district.

3.10.2 Maternal healthcare user related barriers

Barriers to maternal healthcare users include perceived user fees, lack of knowledge of complications, perceived number of ANC visits, fear of HIV testing, perceived number of ANC contact visits, maternal healthcare user attitude, age and experience, other responsibilities, reluctance to book during ANC visits, more trust in the help provided in the community, fear of staying at the hospital longer, physical factors and perceptions regarding the presence of male nurses. Table 3.8 shows a summary of the barriers that hindered women form utilising maternal healthcare services.

Table 3.8: Maternal healthcare user related barriers

Antenatal	Intrapartum	Postnatal
Lack of knowledge	Lack of knowledge	Lack of knowledge
	Fear of staying at the hospital longer	
Reluctance to book for ANC and to attend more ANC contact visits		
Maternal healthcare user attitude		
Age and experience	Age and experience	
	Physical factors (pain and fast labour)	Physical factors (pain)
Other responsibilities		Other responsibilities
More trust in help provided in the community		
Seek maternal healthcare services when there is a problem		Seek maternal healthcare services when there is a problem

3.10.2.1 Lack of knowledge

Knowledge is fundamental to desirable behaviour (Zamawe, Banda & Dube, 2015:591). Lack of knowledge therefore affects positive health seeking behaviours. The findings from this study revealed that some women were not even aware that they were pregnant, and others did not have knowledge about labour pains as indicated in the following quotations:

CM 6: *Some women when they get pregnant, may not know that they are pregnant. They can go for months without knowing. So when they start counting, they may be behind. So when its due, they will be in pain, they may think it is just ordinary pain.*

MHCP 7: *Sure, because if we look, it could be lack of information. It is ignorance. She does not know that she has a problem…. She does not see it as a problem. So I think some things may happen that way because they lack information. They may not have received enough information inorder for them to know that they have a problem and the seriousness of the problem*.

MHCP 4: *It could be because they do not know why it is important*.

Contrary to these findings, women in Malawi were aware of the importance of attending postnatal care and alluded to the fact it had been very helpful to first timer mothers as it provided them with crucial information to help them take care of themselves and the baby (Zamawe, Banda & Dube, 2015:591). The findings from this study are consistent with those cited in a meta review of global experiences of women by Nair, Yoshida, Lambrechts, Boschi-Pinto, Bose, Mason and Mathai (2014:4) in which a lack of knowledge on expected complications caused women not to utilise available healthcare services. Lack of knowledge was also cited as the reason women do not access maternal healthcare services in a study done in South Africa (Tsawe & Susuman 2014:8), Malawi (Zamawe, Banda & Dube, 2015:592) and India (Bhimani, Vachhani & Kartha, 2015:259). Consistent with these studies, lack of awareness about the seriousness of the disease was cited as one of the reason women delayed in seeking maternal healthcare services in Karachi (Sha, Hossain, Shoaib, Hussein, Gillan & Khan, 2009:97). To enhance utilisation of maternal healthcare services, information relating to complications and importance should be disseminated to women of child bearing age.

3.10.2.2 Fear of HIV testing

HIV testing in pregnancy is necessary for one to receive antiretroviral treatment, as early diagnosis and access to treatment reduces the risk of onward transmission (Evangeli, Pady & Wroe, 2015: 880). The study findings showed that there is still fear of HIV testing among women and this fear affects utilisation of antenatal services and subsequently accessibility to PMTCT programmes. The following quotations from the participants demonstrate how fear of HIV testing acts as a deterrent to utilisation of maternal healthcare services:

CM 5: *….most people are still afraid of being tested. Because if they go to hospital they will be tested.*

CM 7: *Most people are still afraid of HIV testing. It has not been accepted by them that they should be tested so that they know their status. So people are still afraid of that. That is why they do not go to the hospital.*

PNW: *Others do not want to be tested at all. Some know that their health is not okay but still they do not want to get tested. What they do not know is that they are being cruel to the baby.*

A systematic review of studies in Sub-Saharan Africa confirmed that fear of disclosure of HIV status could be the reason women deter from utilising healthcare services (Gourlay, Birdthistle, Mburu, Lorpenda & Wringe, 2013:6). In another study conducted in Brazil, fear and nervousness were identified as major barriers for uptake of HIV testing among men who accompanied their women for prenatal care (Yeganeh, Simon, Mindry, Nielsen-Saines, Chaves, Santos, Melo, Mendoza & Gorbach, 2017:5). Contrary to this behaviour, a study conducted in Ghimbi town, Ethiopia by Mitiku, Addissie and Molla (2017:6) showed that a desire to protect the unborn babies from HIV acted as enabler to HIV testing.

Results emerging from the quantitative findings of this study showed that most women were counselled and tested for HIV during ANC despite fear towards the investigation outcome. The plausible reason for the women overcoming fear and volunteering for HIV testing could be the need to protect their unborn babies. Health messages can be developed incorporating the need to protect unborn babies from HIV infection as a reason to have an HIV test.

3.10.2.3 Reluctance to book for ANC and to attend more ANC contact visits

ANC booking is important for woman as this is an opportunity for them to be screened of risk factors and be given health information for birth preparedness. Yet in this study, participants expressed that most women do not book in Mhondoro-Ngezi district. The participants attributed failure to book due to a lack of knowledge of the importance of such services.

PNW 3: *Others ignore going to book their pregnancies. They say I will go when I am in labour. I think it is because they do not know why it is important to come and book early. They do not know that you may have other problems which can be detected if they come to clinic early. Others do not put much importance in it; they just say I will go to hospital when I am in pain and delivering*.

Problems encountered by women who are not booked were summed up by one of the community members.

CM 3: *There is a problem of not booking in this area. Pregnant women do not book their pregnancies resulting in them delivering on the way to hospital, on the road or being delivered by elderly women who do not have gloves or anything in the community.*

One of the maternal healthcare providers mentioned that some late bookings were done by single women who were facing problems at home due to unplanned pregnancies.

MHCP 7: *We also have those who were spoilt [impregnated out of wedlock] in the community. These are some of those who give us problems of booking their pregnancy late. The family sit down and have some discussions asking the girl who the father of the pregnancy is. She should go to the boy's homestead. All these discussions take time delaying booking yet they are not related on issues to do with pregnancy. They should have their discussions after the pregnancies have been booked.*

In a study conducted in rural Tanzania by August, Pembe, Kayombo, Mbekenga, Axemo and Darj (2015:5), findings revealed that girls who become pregnant before marriage do not disclose their pregnancy to parents and may not attend ANC and deliver at home.

According to the latest WHO (2016:1) recommendation, a minimum of 8 contact visits should be undertaken by pregnant women during pregnancy. However, when the situational analysis was conducted, the recommended number of contact repeat visits was still at a minimum of four visits. In this study, perceived increase in number of antenatal care repeat visits was cited as one of the reasons why women did not return for ANC contact visits. The participants reported that women did not want to have more visits.

MHCP 7: *From gathering information, another woman I once asked said, 'Ahh I was reluctant to book my pregnancy at three months. I thought if you book your pregnancy at three months, you will come to clinic for six months, continuously coming to clinic every month.'Women think that they will be coming to the clinic every month. So she said, 'I delayed to come so that I will come to clinic less times'.*

MHCP 5: *It is true, what you are saying. I told my daughter to come and she said, 'Aah no, if you book early you will go to clinic more times before you deliver.'*

The WHO (2016:1) reports that globally, during the period 2007–2014, only 64% of pregnant women attended the minimum four ANC contact visits. If women could not meet the minimum required visits, increasing the number of contact visits may not yield much progress in encouraging women to utilise maternal healthcare services. In view of these findings, policy makers need to consider context specific interventions and incorporate women's views in adopting guidelines and policies.

3.10.2.4 Fear of staying at the hospital longer

Across the focus groups, participants reported that women do not want to come early in labour because they do not want to stay at the hospital longer as evidenced by the following quotations.

PNW 3: *In most cases women think that they should go to hospital when labour pains are severe because they may stay at the hospital longer before delivering if they go too soon, so they wait until it is severe.*

PNW 1: *Some women think that they should go to hospital when the pain is severe. They do not want to stay long at the hospital before delivering, so they wait until it is severe. They end up delivering at home or on the way to hospital.*

PNW 5: *Others think that if they come when pain is not severe they will spend more time here.*

MHCP 8: *You hear women saying, 'If I go early, I will stay at Murambwa clinic for long time'. She does not know that there is a time for everything. If she was in labour for two days before, she thinks she will also spend two days. Maybe there were some problems that caused the baby to delay in pushing. They do that resulting in a person delivering on the road or being delivered by elderly women in the community who do not have gloves.*

Consistent with the findings in this study, Sialubanje, Massar, Pijl, Kirch, Homer and Ruiter (2015:6) reported that women in rural Zambia delivered at home because they delayed in making the decision to leave home. There is a need to create awareness on importance of institutional delivery. Women need to be told that complications can be detected early and necessary interventions are initiated promptly if one is being monitored by skilled health personnel.

3.10.2.5 Maternal healthcare user attitude

Shyness, stubbornness, procrastination, pride, laziness and indifference were some of the healthcare user attitudes that the participants cited as reasons for women not utilising maternal healthcare services:

CM 7: *The other problem that I noticed is women are full of themselves. I don't know what it is. I don't know whether that is what you call pride in English. It is more pronounced in women when they are pregnant. She appears as if she is the nurse. She tells you that I know when I should go. Even when she is asked to come and wait here she will say I know my days. I will go when my days are due.*

MHCP 6: *Some are shy to come and book. They are shy to tell people that they are pregnant. It takes them a lot of time.*

MHCP 5: *It is due to procrastination (utsimbwarimbwa). That also causes a person to delay in coming to hospital until they feel that they are in labour*

CM 1: *Laziness causes some women not to come to clinic. They will be feeling lazy to walk to the clinic.*

PNW 2: *Others say why should I go back? What can be the problem? Nothing will affect me. One would be seeing everything being okay, so there would not be any need to come back.*

PNW 3: *What happens at three and ten days is that some say there is nothing that will be done at me if I go there. They just look at me and I go back home. My child is alright and is growing well.*

PNW 1: *Yes. Most of the women do not come back. If the child is alright and they are also alright they do not come back*.

The findings from this study are consistent from a study done in India by Joshi, Mahalingam and Sorte (2016:2174) in which the main reasons given by postnatal women for not attending ANC and PNC were apparent health during pregnancy. In a study conducted in Rwanda by Rwabufigiri, Mukamungo, Atahomson, Gautier and Semasaka (2016:3), women in the study had the mentality that pregnancy is not a disease hence they did not seek maternal healthcare services.

3.10.2.6 Age and experience

The participants reported that women who had previous experiences preferred delivering at home. Some of the reasons cited by the participants were that older women were shy to be seen delivering at the same time with younger women and others felt they had experience. In addition, the participants reported that the younger ones may not know what to do.

CM 4: *We also think that some women are still young and are still shy. But when they are older women, they have experience. They went to hospital before when they were pregnant. But if they are the young ones, who were impregnated while at school, they may not know what to do. Sometimes their husbands or boyfriends may be at work they may not know what to do.*

CM 5: *In older women there is also an issue of shyness. They say how can I be seen by young people being pregnant? These are some of the problems encountered by women who are older.*

CM 7*: In older women most will say that they are now experienced so they can deliver at home. But this behaviour leads to problems.*

These findings mirror those in a study in Chipinge South district in Zimbabwe (Gore, Muza & Mukanangana, 2014:117) where women who got pregnant at an early age or at an older age were embarrassed to utilise ANC services. Consistent with these findings in a study conducted in Uganda, shyness among teenagers was one of the reasons cited for late booking (Kawungezi, 2015:139). Older age was associated with less postnatal utilisation in Rwanda in a study conducted by Rwabufigiri, Mukamungo, Atahomson, Gautier and Semasaka (2016:3). The reason could be attributed to confidence with experience gained from previous pregnancies.

3.10.2.7 Physical factors

The study highlighted that painful stitches and fast labour acted as barriers to utilisation of maternal healthcare services.

PNW 3:*…But mostly it is the problem of walking. They will be in pain. That is the problem. People are hesitant of walking.*

PNW 1: *One may have delivered and had stitches and she might have been lazy in cleaning the stitches properly or might have been reluctant to clean because of the pain and the stitches would not have healed. So she will be in pain and she can't walk to the clinic.*

MHCP 4*: I also want to add. There are some circumstances that you do not procrastinate. For example, I have a child I delivered in the road while I was coming to hospital. I didn't take an hour experiencing pain while I was at home. It was a short time, a short time, nothing came out but just a short time the baby was pushing. I delivered the baby on the road, under the Muhacha tree. That is where I delivered my baby, there on my way here [hospital].*

The above findings are consistent with sentiments expressed by women in Malawi who indicated that because of the pain that they experience during childbirth, they cannot move around (Zamawe, Masache & Dube, 2015:591). In a study conducted in Mashonaland Central Province in Zimbabwe, 33.0% of women who had delivered at home reported that the baby came fast before they could access a health facility [Organization for Public Health

Interventions and Development (OPHID) 2012:28). In another study conducted in Uganda, women cited abrupt onset of labour as the reason for being delivered at home by traditional birth attendants (TBAs) (Kawungeza, 2015:135). In North-Central Nigeria, women reported that they delivered at home because the deliveries were imminent (Al-Mujtaba, Cornelius, Galadanci, Erekaha, Okundaye, Adeyemi & Sam-Agudu, 2016:4). Similarly, women in health facilities in the Eastern Cape, South Africa reported that they delivered at home or en route to the hospital because the labour was too fast (Alabi, O'Mahony, Wright, Mohlomi & Ntsaba, 2015:6).

3.10.2.8 Other responsibilities

Mhondoro-Ngezi district consists of mainly peasant farmers who rely on proceeds from farming for survival. Hence, some women were reportedly reluctant to leave their fields and attend ANC.

CM 4: *When it is ploughing time others may not want to abandon their fields they will be weeding. They will not go for scale [ANC] because they will feel they will lag with their work.*

CM 5: *The woman may be staying with an old person who is ill or orphans who also need someone to take care of. It becomes a problem to leave them behind and come to scale.*

Consistent with these findings, postnatal women in India reported that women did not utilise maternal healthcare services due to lack of time because of household work (Joshi, Mahalingam & Sorte, 2016:2174). In rural Zambia, Sialubanje, Massar, Pijl, Kirch, Homer and Ruiter (2015:8) reported that women who did not use maternity waiting home cited lack of a family member to take care of children at home.

3.10.2.9 More trust in help provided in the community

Participants reported reliance on care provided by elderly community women during pregnancy as the reason some women do not book their pregnancy.

PNW 5: *Women prefer elderly women in the community. They do not bother booking because they know that they will assist them.*

PNW 3: *The elderly women help them with herbs to open the birth canal.*

From the above quotations, it seems the role of the elderly community members in maternal health continues to be an important one at community level. The preferences seem to stem from the perception that they prepare women for safe delivery. As decisions to seek maternal healthcare are not solely dependent on individual characteristics, it is imperative to incorporate the community involvement and support in the provision of health to the

women. Consistent with these findings, women in Indonesia (Titaley, Hunter, Dibley & Heywood, 2010:7) trusted care provided by traditional birth attendants because they spoke the same local language and shared the same culture.

3.10.2.10. Seek maternal healthcare services when there is a problem

Participants reported that most women do not routinely seek healthcare services but seek services of traditional or religious attendants and only come to the health facility when there is a problem:

PNW 3: *Some frequent apostles while others go for traditional assistance. When you see them coming to clinic, usually the baby would have developed flue. That is what mostly happens.*

MHCP 6: *I encountered a problem like that with a woman who had not booked. She came to hospital when the pregnancy was seven months. At seven months the pregnancy started draining water, we brought her to hospital.*

MHCP 7: *So for those from Marange church whom I am talking about, there are some who pass through here, I think they are now many. Those who would have gone to their church tents to have their babies turned, they end up coming here. They also refer each other here. They would not have written it down on the card that they are referring them but they would have told the woman that, 'We have failed. Go somewhere for assistance'. You then see that person coming to hospital.*

Utilisation of healthcare services when a problem arises result in worsening of the health problem which can lead to morbidity and mortality. Consistent with these findings, in a study conducted by Mason, Dellicour, Kuile, Oumar, Phillips-Howard, Were, Laserson and Desai (2015:5) in western Kenya, women reportedly sought a health facility only when experiencing complications, otherwise they preferred traditional birth attendants.

3.10.3 Support system related barriers

Table 3.9 summarises the support system related barriers that emerged from the three focus group discussions.

Table 3.9: Support system related barriers

Antenatal	Intrapartum	Postnatal
Lack of spousal support and involvement	Lack of spousal support and involvement	Lack of spousal support and involvement
Partner refuses HIV testing		
Partner not at home	Partner not at home	Partner not at home
	Lack of community support	
	Presence of traditional birth attendants/ elderly women/relatives	

3.10.3.1 Lack of spousal support and involvement

The WHO (2015:17) reports that involvement of spouses during pregnancy, childbirth and after birth facilitate and support improved self-care of the woman, improved home care practices for the woman and newborn and improved use of skilled care during pregnancy, childbirth and the postnatal period for women and newborns. In this study, some participants reported that poor utilisation of maternal healthcare services was caused by lack of spousal support, either because the husband works away from home or is not interested at all about pregnancy issues or the woman will be single. This could be due to cultural beliefs and norms. Some male participants alluded to the fact that culturally, men are not expected to be present when women deliver but to provide resources. In addition, some men were reported to be uncaring towards their pregnant wives.

CM 7: *Most men do not care for their wives when they are pregnant. Most men think about drinking beer. They are not responsible of their wives. They say the woman should take care of themselves. They think that when their wives are pregnant it is the responsibility of their mothers and birth attendants. They don’t know that it is their responsibility. If you have your mother who is old can she take that responsibility of moving around with your wife day in and day out?*

PNW 5: *Most of the time men encourage their wives to go to hospital but because of laziness the woman does not go and she eventually delivers at home.*

CM 2: *I notice that most of the time when women were delivering, most men thought they were not needed during delivery. But if you ask us to seek horses to transport the woman we do that. They do not check the condition of the woman they are carrying. They are constrained. This has always been the norm and man are now used to that.*

These findings were corroborated by Ngomane and Mulaudzi (2010:3) who indicated that mother in-laws in the Bohlabelo district in Limpopo, South Africa accompanied their daughter in-laws to hospital to give birth. Similarly, in Nepal, mother-in-laws were reported to encourage their daughter in-laws to attend ANC (Simkhada, Porter & Teijlingen, 2010:6). A study conducted by Sialubanje, Massar, Hamer and Ruiter (2015:8) in Zambia found that mother in-laws helped their daughter in-laws to deliver when the traditional birth attendants were not available.

The above findings highlight the gender norms and values society dictate. The involvement of men in maternal health issues has been always been a problem. It is rare to see men accompanying their partners to antenatal care let alone in labour. It has always been the domain of women. Men are usually in the background assisting with financial support. To support this notion, Singh, Lample and Earnest (2014: 2) observe that in most cases, men help in encouraging women to attend and providing money for baby preparation and transport. This assertion resonates with findings in Zambia where Sialubanje, Massar, Hamer and Ruiter (2015:6) report that husbands in their study encouraged and supported their wives in delivering at the clinic. Similarily, a study conducted in Brazil showed that some men thought male participation was important for men to learn about being a father (Yeganeh, Mariana, Mindry, Nielsen-Saines, Chaves, Santos, Melo, Mendoza & Gorbach, 2017:10). In contrast, a study conducted in Uganda by Kawungezi (2015:139) reported that men did not think they should be involved in childbirth and said they leave their elderly mothers to assist. Surprisingly, in a study conducted in Malawi by Kalulanga, Sundby, Chirwa, Malata and Maluwa (2012:6), women did not want their husbands to accompany them to a health facility and did not communicate to them about the need for them to be involved.

CM 2: *Health personnel should spread the message that the men are also needed.*

MHCP 5: *Most men now understand that they should come with their wives to book.*

CM 6: *Like what is happening these days when one is going to book the pregnancy. The father should be in front while the mother is following (baba pamberi mai mumashure) [husband and wife should come together]. The father should get in first and should be the one to speak. They should be together. Even the counselling that is done should involve both.*

Similarly, in a study done in Maligita and Kibibi provinces in Uganda, participants advocated for creation of awareness among community members on male-partner involvement (Singh, Lample & Earnest, 2014:7).

3.10.3.2 Partner refuses HIV testing

Postnatal women reported that some partners refuse to accompany their wives to hospital because they do not want to be tested for HIV even when they know that their health is deteriorating.

PNW 5*: When it comes to testing that is when men are reluctant…*

PNW 3: *When it comes to HIV testing men refuse.*

PNW 1: *Some men refuse to come to clinic because they know that their health status is not okay. They do not want to be tested. They do not want their health status to be known. I think they should be encouraged to go to clinic, whether they have HIV infection or not. If they have the infection they are some measures that can be taken to prevent the baby form getting the infection.*

The refusal of men to be tested for HIV has negative implications on PMTCT programs uptake. Compliance with PMTCT interventions may be compromised if both partners are not supporting each other. Nyondo, Chimwaza and Muula (2014:9) conducted a study in Malawi and participants reported that lack of male involvement perpetuates non-dislosure of HIV test results between partners and ultimately affecting compliance with adherence to ART. In rural Tanzania, August, Pembe, Kayombo, Mbekenga, Axemo and Darj (2015:4) reported that participants cited fear of HIV testing for partners during the ANC as the reason they did not come for ANC. In the same study, participants reported that inorder for HIV test to be done, women were asked to bring along their partners and because their partners refused the women would not attend ANC.

3.10.3.3 Partner not at home

The participants reported that some women did not come to the clinic because they will be waiting for their partners who will be away. The findings from this study point to the decision-making processes within families. The decision to seek healthcare services seems to rely on the partners.

MHCP 2: *I wanted to say that others may refuse to go to clinic and say, 'I will not go before my husband comes'. She will be in pain but she will refuse to go waiting for the husband who will be away.*

MHCP 5: *What she will be waiting for is nothing. The preparation bag will be there. Why are you not going? She says, 'I was waiting for my husband to come.' So in the event that the baby dies, the baby can die because she will be waiting for the husband.*

CM 4: *At times their husbands or boyfriends may be at work and they may not know what to do.*

MHCP 7: *But we also say even if the husband is far away with work, there are some husbands who are in South Africa or somewhere, that should not stop them from coming to book. They are some who say, 'I was waiting for father'*.

With regards to postnatal follow up one community member observed,

CM 7: *Others will have gone back to their husbands. Let say they delivered here, and the husband stays in town. When a month elapses, they leave for town where their husbands are. So they will not come back here for postnatal care.*

The above statements illustrate who has the decision-making power in the families. These findings corroborate with those from North-Central Nigeria (Al-Mujtaba et al, 2016:4) where women also cited absence of partners to accompany their wives to hospital as a barrier to utilisation of maternal healthcare services. In contrast, women who went into labour in the absence of their husbands, in a study conducted by Sialubanje, Massar, Hamar and Ruiter (2015:6) in Zambia, reported that other people like children, parents or neighbours would call for assistance rather than wait for the absent partner.

The behaviour reported by the participants in this study shows some women's dependency on men. Sialubanje, Massar, Pijl, Kirch, Hamer and Ruiter (2015:10) comment that women's dependence on their husbands for the final decision could be due to the socio-cultural beliefs that recognise the husband as the head of the family. Women need to be empowered financially, socially and culturally so that they can make decisions pertaining to their health. UNDP (2011:12) observes that women's empowerment determines access to education, economic self sufficiency and autonomy in daily life and decision making in healthy choices.

3.10.3.4 Presence of traditional birth attendants / elderly women/ relatives

Presence of traditional birth attendants and availability of other community members to assist with deliveries in the community might be the reason why women do not promptly go to hospital once labour starts. Traditional birth attendant refers to a community-based person who assists the mother during pregnancy, childbirth and the postnatal period and who initially acquired their skills by attending births themselves or through an apprenticeship to other traditional birth attendants (WHO, 2015:30). To reduce maternal morbidity and mortality, the Zimbabwean government passed a policy which inhibits traditional birth attendants from assisting women in labour at home. Due to unexpected

deliveries at home, some women are still utilising traditional birth attendants, but they conduct deliveries secretly because of the government ban. When the participants were asked if traditional birth attendants were still available, community members were divided with some saying yes and others saying no.

CM 7: *Traditional birth attendants are not there in our community*.

CM 2: *They are there but they are few. They don't want to be known*.

PNW 2: *For someone to go to the traditional birth attendant maybe you would have miscalculated your dates or labour starts at night, then one can call them, they deliver the baby and they will later go with you to the clinic.*

CM 7: *Most of the time these birth attendants (nyamukuta) want payment, such as chicken, money depending on what have you agreed on regarding delivering. So it is a problem. Most women deliver on their own and take their baby to hospital to get a birth record*.

MHCP 8: *Problems are there in people who deliver in homes. Eeh traditional birth attendants some do not ask women their health status. The reason they should ask is because they should know whether one will be taking ARVs because those who are positive and are pregnant are given a pill they should drink. So an individual may not have taken the pill. They are suppose to ask the women whether they had swallowed the pill. If it is there they should tell them to drink the pill then they can proceed with delivering the baby*.

CM 3: *There are problem that are faced when women deliver at home. In our community a woman had three babies and they all died during home delivery. If they had gone to hospital, the babies may have survived.*

CM 7: *Most of the time they are assisted by anyone who does not have the knowledge. They use razor that have been used before. Most of the time you hear that air entered the baby's body and that baby may not survive and die*.

PNW 5: *Those who will have been delivered by birth attendances at home pay them. They ask for small hens if you do not have money.*

In many African countries, traditional birth attendants are still being used to complement skilled birth attendants and women prefer them because they offer social and cultural support to women during childbirth. In a study conducted in Western Kenya by Kawungezi et.al (2015:134), women were delivered by traditional birth attendants because they could not afford ANC costs at health facilities. In the same study, women paid traditional birth

attendants for services rendered with commodities or instalments. A study conducted by CheChi, Bulage, Urdal and Sundby (2015:7) reported that women in Burundi did not deliver at health institutions because they had confidence in traditional birth attendants.

Unless distance and transport barriers are addressed, women will continue delivering at home. Policy makers may need to revisit the policy of restricting traditional birth attendants because they are still there and are practising without any form of monitoring. There is need to endorse a partnership program between trained and traditional birth attendants, where notes will be exchanged, and existing maternal healthcare services are adjusted and adapted to suit local conditions.

3.10.3.5 Lack of community support

Participants reported that sometimes women fail to come to hospital because community members may refuse to give them their animals to transport them when there is an emergency.

PNW 2: *Sometimes you may not have cattle to take you to the clinic. You then need to ask others to assist you. People may not be willing to assist.*

MHCP 7: *Sometimes your neighbour may refuse to give you their ox or donkey because you might have refused to give them a bundle of vegetables last week. These are problems that may be encountered when people are living together. These are some of the problems that cause delays***.**

These findings are a concern as community capabilities empower communities to identify, mobilise and address social problems in a community (Paina, Vadrevu, Hanifi, Akuze, Reder, Chan & Peters, 2016:62). Contrary to these findings, studies reported that in Uganda, there are community referral and transport systems that are widely used, and they have enhanced communication between the community based health workers and health facilities (UNHRO, Makareke University, Uganda Ministry of Health, Supporting the use of research evidence (SURE), Regional East Africa Community Health Policy Initiative (REACH) and EVIPnet 2012:25).

3.10.4 Culture related barriers

Martin and Nakayama define culture as learned patterns of behaviour and attitudes shared by a group of people (2010:84). In this study, utilisation of maternal healthcare services in the first trimester was reportedly affected by cultural beliefs and norms such as the need to hide pregnancy in the early stages for fear of witchcraft and use of herbs. Table 3.10 summarises the cultural barriers that were reported during the focus group discussions.

Table 3.10: Culture related barriers

Antenatal	Intrapartum	Postnatal
Use of herbs	Use of herbs	**Use of herbs**
Cultural beliefs and norms		Cultural beliefs and norms

3.10.4.1 Cultural beliefs and norms

Folashade, Okeshola and Sadiq (2013:79) state that cultural background and thoughts influence beliefs, norms and values. Understanding the indigenous beliefs and practices of clients regarding maternal health issues is important for formulation of context specific interventions. Fear of mysterious traps was reported in this study to be the reason why women were forbidden from moving around while pregnant. This practice may be preventing women from visiting health facilities.

CM 3*: In our culture we say when you are walking in the roads while pregnant you will step on traps (mumvurewa). So women are not suppose to move around while pregnant. They are told to stay at home.*

Participants reported that women do not disclose their pregnancy early because they fear they will be bewitched and abort or the child will be taken from the womb. The fear is so severe that even the village health workers are not told when the woman is pregnant.

MHCP 7*: There are some women who start by hiding their pregnancy. They are afraid that when the pregnant is too small it should not be known by neighbours (ehe others agree) or even vana mbuya hutano (the village health workers) sometimes it is hidden from them. This is because they believe that if the pregnancy is known early, one will abort or the child will be taken from the womb.*

CM 7: *I think all vanasabhuku (headmen) in the community should encourage all women to book. We sometimes have different meetings with our headmen. Mbuya hutano (village health workers) should tell the headmen to encourage all women to go to hospital to book. No one should deliver at home without having booked. Yes, delivering at home yet they had booked before can happen because when it is time to deliver it does not matter that one booked late or one is on the way to hospital. Therefore, they should be encouraged that when they are seven months old they should go and stay at the hospital. Staying in hospital is important to prevent problems.*

With regards to involving community leaders in promoting institutional deliveries, Butrick, Diamond-Smith, Beyeler, Montagu and Sudhinaraset (2014:7) reported that in Malawi, local chiefs and other leaders motivated women to deliver in facilities and enacted bylaws

involving fines for both women and traditional birth attendants who delivered at home. To support this notion, Nyondo, Chimwaza and Muula (2014:8) observed that since chiefs are the custodians of culture and enforcers of customs and activities in the communities and considering their positions and authority, they would ensure that their communities adhered to any recommendations by healthcare workers.

The cultural belief in Mhondoro-Ngezi that newborn babies should be secluded from other people a few days after delivery because of fear of witchcraft deter women from returning or bringing babies delivered at home for examination during the post partum period. Sanctions that are imposed on individuals who fail to adhere to these beliefs and norms reinforce the behaviours and practices that are expected from individuals after giving birth.

CM 2: *There is a law in these areas that when a child is born, they are days that the women are told not to get out of the house. They will be told that after such days you cannot get out and go to hospital for treatment.*

CM 7: *Some mothers stay indoors for seven days or a month, the newborn not getting out. Napkins are dried inside the house. People are not allowed to get inside the house. They say the child's health will be affected. Just as sekuru (the elderly man) explained. They give a lot of importance to the child's health. They believe that others will be dirty and others use mushonga [African medicine] privately which will affect the new born baby. That is why they stop people from getting in the room the new born baby is.*

Cultural beliefs and norms about pregnancy have been reported to have an influence on the utilisation of maternal healthcare services elsewhere in literature (Simkhada, Porter & Teijlingen, 2010:2). These findings explain the earlier results where most women book late in pregnancy. Delay in seeking services early in pregnancy interferes with early detection of risk factors as well as PMTCT interventions. These findings are a cause of concern as the days that women and babies are secluded are high risk periods and need monitoring to prevent maternal and neonatal morbidity and mortality. Consistent with the findings of this study, some postnatal mothers in Lemo Woreda, Ethiopia were culturally prohibited to go out of home for postnatal care before 6 weeks because the woman will suffer from inflammation if they get out of home (Belachew, Taye & Belachew, 2016:6). Pomerai (2011:37) reported that in Bikita district in Masvingo Province in Zimbabwe, babies were not allowed outdoors until the umbilical cord fell off. The reason cited for the seclusion was to protect the baby from people with evil powers that make children with umbilical cords ill.

The findings in this study are consistent to those found in Zambia where fear of disclosing one's pregnancy early was the reason why women booked late (Chama-Chiliba, 2013:81).

In a study conducted in Malawi by Zamawe, Masache and Dube (2015:590), participants reported that women did not disclose their pregnancies early because some jealous people can hurt pregnant women by closing the birth canal, so that they are not able to give birth normally when their time is due and as a result they die of maternal complications. Hiding of pregnancy from friends and strangers during the first few months was also confirmed by Ngomane and Mulaudzi (2010:4) in a study conducted in South Africa.

3.10.4.2 Use of herbs

Use of herbs was mentioned in all the focus group discussions. Because the herbs have specific instructions that need to be followed while the individual is at home, some women end up not going to the hospital or clinic and deliver at home in order for them to follow the specified instructions.

Women who have had problems with previous pregnancy were cited by one participant as targets for the stabilisation of their pregnancy.

MHCP 2: *Some women also use African medicine. Let's say they had an abortion before, they say they must be given some herbs so that the same thing will not happen again. They are given some herbs which they are told to put on the roof top. They will not go and stay at the mother's waiting home because they would have been instructed to remove the herbs on the roof top when labour starts.*

MHCP 7: *There are some* mushonga (herbs) *that they are afraid of fear which is called nhova [herbs used to prevent a sunken fontanel].* T*his practice deters women from seeking healthcare services during the stipulated periods, prevent women and babies from going for review after delivery.*

CM 2: *When mothers mix with other children who are older and were given herbs for protection against nhova (sunken fontanel) and theirs is young and was not given, it is believed that the young one will get sick. So they are days that they are allowed to go out with the new born. So I see as if that is one of the reasons why women delay in coming for check-up with their babies.*

The findings of this study are not peculiar to Mhondoro-Ngezi district only. The practice of using herbs was not condoned in health facilities in rural Tanzania, (Siajabu, 2009:34). In Saudi Arabia (Al-Ghamdi, Aldossari, Al-Zahrani, Al-Shaalan, Al-Sharif, Al-Khurayji & Al-Swayeh, 2017:4) doctors were indifferent to the use of herbal medication in pregnancy. The findings in this study point to a need for clear policy guidelines on the integration of biomedical medicine and herbal medicine in maternal health. Integration will motivate women to utilise maternal healthcare services without fear of having the herbs removed and

at the same time further research on efficacy and dosage standardisation can be undertaken using biomedical technology.

3.10.5 Religious related barriers

In Zimbabwe citizens enjoy the freedom of worshipping any religion of choice. Religion has always been an integral part of Zimbabwe's foundation of culture and has an enormous effect on Zimbabwean society and behavioural patterns. In this study, religion emerged as an imperative indicator to maternal healthcare services utilisation. Although St. Michaels Mission Hospital is a Roman Catholic hospital, the community members belong to different denominations with different practices and norms. The study findings revealed that women from apostolic sects are less likely to attend antenatal care, deliver at healthcare facilities or come for postnatal check-ups. CCORE (2011:23) identifies two distinct groups of apostolic sects, namely the ultra-conservative (fundamentalist) Apostolic groups because of their objection to use of modern health services and their strong beliefs and emphasis on strict adherence to church teachings and doctrine while the semi-conservative and liberal Apostolic groups emphasise faith healing and consult spiritual leaders prior to seeking professional medical assistance. In this study, the two groups of Apostolic sects are reportedly present in the district and the adjacent districts.

Under the religious barriers, fear of mystic forces, church doctrine and healing practices were reported by the participants. Table 3.11 summarises the religious related barriers.

Table 3.11: Religious related barriers

Antenatal	Intrapartum	Postnatal
Fear of mystic forces		Fear of mystic forces
	Church doctrine	
Religious healing practices		

3.10.5.1 Fear of mystic forces

Mpofu, Dune, Hallfors, Mapfumo, Mutepfa and January (2011:558) posit that the predominant belief in metaphysical explanations for ill health among the Apostolic church members influences their health seeking behaviours.

CM 7: *The issue here is that in hospital, they know that modern medicine treats a woman to this extent and they do not look at other things, as prophets do. We believe that they are spirits that follow us. At hospital they do not look at spirits that follow us. They believe that a person lives the way they were created by God. Traditionalist and apostles say they are spirits that cause harm to people. Traditionalist will be trying to wade off these spirits which they believe cause problems. For example, in the hospitals, maybe you sometimes came*

across problems like these. They are incidents you hear that a woman delivered gunguwo (an eagle). These are some of the reason why apostles will give stones to protect pregnant women.

The above quotation reflects the common belief in evil spirits among the traditionalists and the Apostolic sects. In support of this assertion, CCORE (2011:26) and Mpofu et al (2012:557) assert that the Apostolic sects attribute the root of sickness and illness to sin, ancestral/evil spirits or demonic affliction hence they do not find relief in modern medicine but in their church practices. Commonly held beliefs and norms shape individuals' health seeking behaviours (Choguya, 2015:36). Understanding these beliefs and norms is important for policy makers in developing strategies that are inclusive.

3.10.5.2 Church doctrine

Personal religious convictions take precedent over any other factors when it comes to utilisation of healthcare services, more so if the church doctrine requires its member to subscribe to its values. Participants shared with others the beliefs and practices of different religious groups in the district. Strong belief in the healing powers of church and services offered by the elderly church women was cited as the reason why women who belonged to the Johane Marange apostolic sect did not use health facilities.

MHCP 7: *Those from the apostolic go to their church for the pregnancy to be stabilised (tsigiswa). They continue going for prayers until they deliver. They book at their own elderly women there, who will also deliver them there.*

CM 6: *The way I see it, what causes women not to return for review sometimes is caused by chitendero chako (dogma or one's belief). The prophets that assist us at the shrines (masowe) are the ones that bring about this problem of why they should not go back for review. They say the munamato (prayer) should not be mixed up with anything else.*

MHCP 7: *Last week there was a woman who delivered at the shops coming from Kadhani while selling tomatoes. She hired a car to drop her here [at the clinic]. She could not go to their religious birth attendants. People told her to come here but she refused. She said we do not go to hospitals. She gave birth at the shops there. The woman was from the Marange sect. She was brought here for removal of the placenta. She spent two days admitted here. It happened last week. So it is because of one's beliefs.*

The findings in this study are consistent with findings from a study done in Zimbabwe by CCORE (2011:33), where members of the ultra conservative apostolic sects confirm that women are not allowed to utilise maternal healthcare services in health facilities, instead,

they are examined and delivered by elderly church women in ‘makeshift maternal clinics’ or at home, but when complications occur, they seek medical care.

To explain the different doctrines among the Apostolic sect regarding use of modern medicine, this participant reflected:

MHCP 7: *There is another religion that I have failed to understand. It is apostolic but they are those who put on long clothing. They belong to Mwazha. Some of them we see them at the clinic, some of them we don’t see them here. I tried to investigate so that I could understand. I spoke to a certain father who had a wife who booked her pregnancy here but she delivered at home. Till today she hasn’t come here. The child is now three months. She delivered at home. They haven’t come here. They said its one’s choice to come to clinic or not. She has never returned here that woman. She came for ANC only.*

Because of restrictive church doctrines, some members of the Apostolic sect visit health facilities secretly as evidenced by the following quotation:

MHCP 6: *Some of them go secretly as if they are going to fetch fire wood, yet they will be going to the clinic. At the clinic they are served first, they would have been told that when they come, inject their children so that they go back. Some of them hide but they tell others that they do not go to clinic, yet they go.*

Another issue raised by the participants was failure by Apostolic sect parents to obtain birth records for their children because they were not delivered at health facilities. Failure to produce a birth record leads to challenges in obtaining a birth certificate which is required for one to attend school.

MHCP 5: *Most children do not have birth certificates. We have problems with people from this religion. Most children do not go to school.*

Non-attendance of school by Apostolic children was also reported in a study done by Mpofu et al (2011:553) in Manicaland district, Zimbabwe. The study reported that children were withdrawn from school to allow them to attend church meetings. Restricting children from attending school is an infringement on their rights to education. Once children are withdrawn from school, girls are reportedly married off to elderly church members (Mpofu et al, 2011:553). The key concerns to early marriages are premature pregnancies and childbearing and subsequent sequela (UNICEF, 2001:9).

The findings from this study call for continued dialogue between the different cultural and religious groups and the health sector for them to reach a consensus on issues pertaining to maternal health.

3.10.5.3 Religious healing practices

The study highlighted faith and confidence in the healing practices as some of the barriers in seeking maternal healthcare services at health facilities.

MHCP 1: *There are also those who attend apostolic sect, they belief that their child needs kuyereswa (to be sanctified) even when they are not feeling well, they use their muteuro (prayers).*

Because of beliefs and trust in the healing practices some women delay in seeking maternal healthcare services even when there are some complications.

PNW 3: *We use munamato wekumasowe (prayer from the shrine). Prayer helps in that, if the baby was not moving it will turn. Or sometimes one may feel pain on the side, if you drink the prayer even when delivering, you can deliver well without any problems.*

Presence of delivery tents in the communities adjacent to the district was cited as another reason for trusting assistance provided at the apostle shrines.

MHCP 1: *They go and stay at church delivery tents*

MHCP 8: *Those who belong to Marange sect are the ones who after delivery they do everything at their tents.*

MHCP 7*: They continue going for prayers until they deliver. They book at their own elderly women there, who will also deliver them there. Yes they stay there until they deliver there.*

These findings corroborate CCORE's (2011: vii) assertion that faith healing and healing rituals among the Apostolic community are often associated with works of spirit (Mweya), prayers, sanctified (holy) water, sanctified stones (matombo akayereswa), and use of 'apostolic concoctions'. Kutsira (2013:19) agrees that the different 'spiritual objects', holy water and oil prescribed by church prophets are perceived to have healing powers or deliver healing, cleanse impurities or evil spirits, maintain good health or restore it during sickness among the Apostolic church congregants.

3.11 Enablers to Use of available resources and maternal healthcare services

An enabler in this study is any behaviour, practice or activity that influences women to utilise maternal healthcare services. In this study, it was necessary to know enablers to

utilisation of maternal healthcare services in order to strengthen them. A summary of enablers is highlighted in Table 3.12. The enablers will be discussed using the same subheadings used on the section on barriers, namely, healthcare system, maternal healthcare user, support system, community, culture and religious related enablers.

Table 3.12: Enablers to use of available resources and maternal healthcare services in Mhondoro-Ngezi district

Enabler	Antenatal	Intrapartum	Postnatal
Healthcare system related		Availability of skilled birth attendants	Positive health personnel attitude
	Healthcare services offered	Healthcare services offered	Extended hospital stay after delivery
			Extended hospital stay after delivery
	Provision of incentives	Provision of incentives	
		Issuing of birth records and baby cards	
		Provision of transport	
Maternal healthcare user related	Dissemination of knowledge regarding complications and the importance of healthcare	Dissemination of knowledge regarding complications and the importance of healthcare	Dissemination of knowledge regarding complications and the importance of healthcare
Community related	Involvement of community members	Involvement of community members	
	Provision of transport	Provision of transport	
		National policy	
Religious related	Religious association involvement	Religious association involvement	Religious association involvement

3.11.1 Maternal healthcare system related enablers

Presence of village health workers, healthcare services offered, provision of health information, provision of incentives, provision of transport, extended hospital stay after delivery and issuing of birth records and baby cards were reported as maternal healthcare system related enablers for utilisation of maternal healthcare services in Mhondoro-Ngezi district as summarised in Table 3.13.

Table 3.13: Maternal healthcare system related enablers

Antenatal	Intrapartum	Postnatal
	Availability of skilled birth attendants	
Healthcare services offered	Healthcare services offered Extended hospital stay after delivery	
Provision of incentives	Provision of incentives	
	Issuing of birth records and baby cards	

Provision of transport	Provision of transport	

3.11.1.1 Healthcare services offered

Services offered at health facility were highlighted by the participants as checking of health status, management of complications and checking if the baby was growing well. These services attract women who want to check their health status and that of the baby, as indicated in the following quotations:

PNW 3: *Usually what happens when women are pregnant they go for health status checking. Most of the time at the clinic, they encourage pregnant women to go for checking of their health status, and if they are infected they are given treatment*.

PNW 1: *Others go for testing*

PNW 5: *Others go for checking whether the baby is well positioned*

PNW 4: *Most people value the hospital because they say that in case there is some stuff that are retained one will be assisted. At the apostles there is no medication. So they say that if you deliver at the hospital everything will be removed.*

CM 7: *Yes, they are given pills to add their blood and this will help them when they bleed a lot when they deliver. They are also not suppose to treat themselves at home when they get sick. They are suppose to go to hospital because they are not allowed to take any pills without nurses knowing about it.*

MHCP 6: *Now, for example at St Micheals Hospital at three days after delivery women will still be in hospital, no one gets out of the hospital before three days. They will still be in the hospital.*

MHCP 7: E*ven here at Murambwa Clinic women and their babies stay for three days after delivery.*

Most complications cannot be predicted or prevented and require timely diagnosis and appropriate management by skilled attendants to prevent death or morbidity, hence allowing women and their babies to stay at a health institution after delivery ensures that both the mother and the baby are closely monitored.

Consistent with these findings, women in Western Kenya (Mason et al, 2015:4) were motivated to attend maternal health facilities because of services offered, for example, checking for the position of the baby. In a study done in Bikita district, Masvingo Province, Zimbabwe, Pomerai (2011:36) reported that women mentioned that the hospital was the

best place to deliver because complications are managed by trained and skilled health workers.

3.11.1.2 Provision of incentives

Provision of baby clothes and food after delivery was cited as the reason some women deliver at the clinics.

MHCP 7: *Here at the clinic when someone comes and book, we have some incentives. Women are given napkins or one soap bar. A mother maybe in the postnatal period, we expect her to wash the baby's nappies. When a woman delivers here she may get a bucket. All these, we saw as if they motivate women to come. We make a cup of tea for women after they have delivered. When one delivers we give them tea. These are some of the things that we see as if are attracting a lot of women.*

CM 6: *When women are told that there is something being given to children they come. This idea was started by the person who started working here. He gave women baby vests. People were coming in numbers. If a child is born and is given a vest, most people would come to the hospital. This can be one of the ways to encourage people to come to the hospital.*

CM 7: *I want to say the time that we are now living in is difficult. Even those who are employed sometimes they do not get their salary and at times they get it. So for our government to give something, it is difficult.*

Consistent with provision of incentives, Butrick, Diamond-Smith, Beyeler, Montagu, and Sudhinaraset (2014:3) report that in India, Accredited Social Health Activists (ASHAs) give women incentives for delivering in accredited private facilities. Similarlily, Gore, Muza and Mukanangwa (2014:119) reported that some participants in a study conducted in Chipinge South district in Zimbabwe cited issuing of clothing as the reason why women attended the recommended ANC visits and delivered in a health facility. The dependency syndrome among people is not sustainable. Communities need to be encouraged to engage in income generating projects where they can pool resources together and assist each other.

3.11.1.3 Issuing of birth records and baby cards

The issuing of birth records was overwhelmingly cited as one of the reasons for institutional delivery as the document would facilitate smooth acquisition of birth certificates. The following extracts illustrate this fact.

MHCP 7: *But they end up coming to hospital because they expect the baby to get a baby card and this is used to get a birth certificate for the baby. So even those who have their*

religious beliefs, they end up coming because it becomes easy for them to get baby cards which they will use to get birth certificates. They end up coming to hospital.

PNW 3: *I see as if hospitals are good compared to home deliveries because, there are those cards that one is given when you deliver at the hospital. If you deliver at the hospital everything becomes easy.*

CM 5: *My wish is that first women should know that for a person to be said is in the world, they should be delivered at hospital. Two when a child is born is recorded at the hospital, is not recorded at church and is not recorded by the traditionalists. It is at hospital where they are given birth records to assist them to get birth certificates.*

These findings help in explaining the high institutional deliveries recorded in this study. Despite reluctance in booking, women still come to deliver at health institutions in order for them to get birth records for their babies which would in turn necessitate acquisition of a birth certificate. A birth certificate is an important document for a child's entry into school. The study revealed that children who belonged to Apostolic sect and were not delivered at health facilities did not have birth records and were not attending school.

Consistent with these findings, CheChi, Bulage, Urdal and Sundby (2015:6) and Gore, Muza and Mukanangwa (2014:118) reported that in Burundi and Northern Uganda and Chipinge South district in Zimbabwe respectively, registration of a newborn baby and getting a birth certificate was the pull factor to institutional delivery. This was because women who did not deliver at a health facility faced problems in securing birth certificates for their children. In a study done in Uganda, out of the majority who considered ANC to be important, 2.47% thought it was only important to get an antenatal card which they would use to get treatment (Kawungezi, Akiibua, Aleni, Chitayi, Niwaha, Kazibwe, Sunya & et.al, 2015:135).

3.11.1.4 Availability of skilled birth attendants

A skilled attendant is an 'accredited health professional, such as a midwife, doctor or nurse, who has been educated and trained to proficiency in the skills needed to manage normal uncomplicated pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns (WHO, ICM & FIGO, 2004:1).

The participants were asked about who women preferred as their service provider during pregnancy, delivery and after delivery and the participants overwhelmingly reported that

nurses were preferred during delivery as they could detect complications and issue medication.

CM 2: *In the hospital there is a lot of knowledge from people who went to school about people's health. So going to hospital is important because what is done in hospital is done by experts*.

PNW 4: *Most people value the hospital because they say that in case there are some stuff that are retained one will be assisted. At the apostles there is no medication. So they say that if you deliver at the hospital everything will be removed*.

Mason et al (2015:5) also reported that women in their study in Western Kenya, mentioned excessive bleeding, retained placenta and having a large or badly positioned baby as a reason for preferring institutional delivery.

3.11.1.5 Provision of transport

One of the participants reported that after getting assistance from the Global fund, the clinics have a system that assists with provision of transport as evidenced in this quotation:

MHCP 7: *We have three ambulances in the district that we can phone for. But because there are many people who need them at times you are told the ambulance has gone to Harare with another patient. So here at the clinic, we have a contingent plan. We have a list of people that we have their contact numbers, whom we spoke to who can provide transport. Even when women come here with a cart, they will not use that during transfer [to central hospital] if there is any problem. She is now under the clinic care. We pay the money which amounts to $10. We agreed with the transport owners. We phone the transport operators and when they are available we transfer patients using their cars. If one transport operator is not there we try the next person. So far, we transport our patients to the next level to cut the second delay*.

The findings from this study call for urgent strategy for the provision of transport from the community to the health facility.

3.11.2 Maternal healthcare user related enablers

Dissemination of information of complications and importance of using health facility were the maternal healthcare user related enablers the participants reported during the group discussions. Table 3.14 summarises the maternal healthcare user related enablers.

Table 3.14: Maternal healthcare user related enablers

Antenatal	Intrapartum	Postnatal
Dissemination of knowledge regarding possible complications and the importance of healthcare		

3.11.2.1 Dissemination of knowledge regarding complications and importance of healthcare

Participants reported that women are given health information on complications that may occur and the need for them to utilise maternal healthcare services.

CM 7: *Yes, they are given pills to increase blood so that they will not have problems if they bleed a lot when they deliver.*

CM 6: *We encourage them once they get pregnant to go to hospital for HIV screening so that the child they give birth to will be healthy and without the virus, HIV.*

From the above excerpts, the general perspective suggests dissemination of more information about possible complications through both formal and informal channels. Consistent with these findings, outreach services, workshops, seminars were used in Malawi to disseminate health information (Zamawe, Banda & Dube, 2015:2).

The sentiments expressed in this study are consistent with those in a study in rural Tanzania where August, Pembe, Kayombo, Mbekenga, Axemo and Darj (2015:6) reported that women mentioned that, at health facility, women are given medication to manage pain and hence they do not suffer much with pain as compared to in the past when they would have suffered more as a result of delivering at home where there was no pain relief.

3.11.3 Community related enablers

The national policy that banned traditional birth attendants from assisting deliveries at home was reportedly the reason traditional birth attendants do not routinely deliver women at home but only assist them in an emergency. In addition, the participants reported that involvement of community members and availability of community-based transport are community-based enablers (see Table 3.15).

Table 3.15: Community related enablers

Antenatal	Intrapartum	Postnatal
Involvement of community members	Involvement of community members	
Provision of transport	National policy	
	Provision of transport	

3.11.3.1 Involvement of community members

Community involvement and participation is important in ensuring every member of the community adheres to maternal health promotion and maintenance activities, as indicated in the following quotations:

CM 7: *In our village, everyone is a nurse. From issues of child abuses, even checking whether children are going to school. Everyone is a policeman. Everyone should be alert. If one notices that there is a problem we remind each other, even asking whether one booked their pregnancy and tell them about the advantages and the disadvantages*.

CM 6: *We encourage them once they get pregnant to go to hospital for HIV screening so that the child they give birth to will be healthy and without the virus, HIV.*

CM 4: *I think that in each community there should be a record that is written and should be sent to the hospital regarding people who are pregnant and stating whether the person went to hospital or not. If that record is compiled monthly by the village health worker, it helps in that there is no one in the community who does not go to the clinic*

Community involvement in maternal health issues is imperative for the uptake of health initiatives, for example, in Malawi, community involvement played an important role in the implementation of policy to restrict practices of traditional birth attendants (Butrick, Diamond-Smith, Beyeler, Montagu & Sudhinaraset, 2014:7).

3.11.3.2 Provision of transport

Participants reported that women who needed to go to clinic use scotch carts, cattle or donkeys available in the community.

MHCP 7: *Common transport here are carts, donkeys and cows. They are used to bring people here at the clinic, but not all people have that.*

In rural Tanzania, August, Pembe, Kayombo, Mbekenga, Axemo and Darj (2015:5) reported that husbands used motor cycles to transport pregnant women in labour or in an emergency because of unavailability of alternative transport.

3.11.3.3 National policy

In Zimbabwe, the national policy aims at re-orienting traditional birth attendants towards mobilising women for institutional deliveries instead of home deliveries (Zimbabwe Ministry of Health and Child Care, 2007:11). To ensure the policy is adhered to the participants reported that chiefs and headmen fine all women who deliver at home without a plausible reason.

CM 5: *There are traditional birth attendants (mbuya nyamukuta) in the community but they do not want to be known because they are no longer allowed to deliver women at home.*

CM7: *Traditional birth attendants are there in the community, but they do not want to be known.*

CM 6: *Traditional birth attendants used to be called at the clinic for training. They were also given gloves and instructed on what to do but they were told to bring the child to clinic as soon as possible.*

Choguya (2014:5) has noted a policy shift regarding traditional birth attendance practices and promotion of skilled birth attendants in Zimbabwe. Following Zimbabwe's independence in 1980, traditional birth attendants were officially recognised in the provision of maternal healthcare services in rural areas and were even trained, supported with home visits and material support to ensure positive birth outcomes (Choguya, 2014:5). However, due to escalating maternal mortality worldwide and decline in institutional deliveries worldwide, the WHO (2008:1) recommended skilled attendance at birth policy, which saw the Zimbabwe government scaling up efforts in the provision of skilled birth attendants during childbirth. For policies to serve their purposes, there is need for all stakeholders to understand the rationale behind these policies otherwise community members will continue with the same practices but in secrecy.

3.11.4 Religious related enablers

Culture and religious norms and values influence individual health seeking behaviour. Participants reported that involvement of the chief and headmen and the religious association group influenced utilisation of maternal healthcare services in Mhondoro-Ngezi district. Table 3.16 shows the cultural and religious enablers. The enablers were combined in the table because they had few sub-themes.

Table 3.16: Religious related enablers

Antenatal	Intrapartum	Postnatal
Religious association involvement		

3.11.4.1 Religious association involvement

The introduction of the African Apostolic Churches' organisation has assisted in encouraging their congregants to use healthcare services, as the following excerpts revealed:

CM 6: *Members of the apostolic used not to go to hospitals long back. They used to deliver in their church. But now there is a council that was formed named ACC meaning African Apostolic Churches represents all other apostles. … The issue was resolved and apostles from Marange, Johane Masowe and all other apostles that were putting a law that women should not go to hospital the council fixed that and now they are coming. They are now number one in coming to hospital.*

This is the age group for child bearing in women and any initiative targeting them is hoped will influence utilization of maternal healthcare services. The adoption of strategies such as Apostolic Maternal and Newborn Interventions (AMENI) in Zimbabwe has also facilitated in addressing poor maternal and newborn health outcomes (UNICEF, 2015: VII).

3.12 Beliefs, practices and taboos

Commonly held beliefs and norms that could be religious or cultural shape the way individuals perceive their health and utilisation of health services (Muchabaiwa, Mazambani, Chigusiwa, Bindu & Mudavanhu, 2012:147). Table 3.17 summarises the cultural and religious beliefs, practices and taboos that are common in Mhondoro-Ngezi district.

Table 3.17: Beliefs, practices and taboos

	Antenatal	Intrapartum	Postnatal
Cultural beliefs and practices	Prevention of anaemia in pregnancy		
	Use of herbs to prepare for birth	Use of herbs to prepare for delivery	
	Other indigenous practices to speed up labour	Other indigenous practices to speed up labour	
	Indigenous practices to prevent complications for mother and baby		Indigenous practices to prevent complications for mother and baby
	Cultural taboos and underlying beliefs		
Religious beliefs and practices	Use of holy objects and fluids	Use of holy objects and fluids	Use of holy objects and fluids
	Practices to stretch the perineum		

The participants in the focus group discussions were asked what beliefs and practices pregnant women were expected to conform to inorder to ensure they deliver a healthy baby. Two major themes emerged, namely cultural beliefs and practices and religious beliefs and practices. The following section will highlight these beliefs and practices as mentioned by the participants.

3.12.1 Cultural beliefs and practices

Cultural beliefs and practices also influence utilisation of maternal healthcare services. Participants reported that pregnant women in Mhondoro-Ngezi district adhere to a variety of practices to ensure a healthy pregnancy and safe delivery. These cultural beliefs and practices delay women from seeking professional maternity care. Table 3.18 shows the cultural beliefs and practices.

Table 3.18: Cultural beliefs and practices

	Antenatal	**Intrapartum**	**Postnatal**
Cultural beliefs and practices	Prevention of anaemia in pregnancy		
	Use of herbs to prepare for birth	Use of herbs to prepare for delivery	
	Other indigenous practices to speed up labour	Other indigenous practices to speed up labour	
	Indigenous practices to prevent complications for mother and baby		Indigenous practices to prevent complications for mother and baby

3.12.1.1 Prevention of anaemia in pregnancy

Anaemia is defined as a low level of haemoglobin in the blood as evidenced by a reduced quality or quantity of red blood cells (USAID, World Bank, UNICEF, Pan American Health Organisation (PAHCO), Food and Agriculture Organization (FAO), Micronutrient Initiative & Population, Health and Nutrition Information (PHNI), 2003:11). In line with WHO (2016:3) recommendations on ANC for a positive pregnancy, all pregnant women attending ANC in Zimbabwe are commenced on iron and folic acid supplements to prevent maternal anaemia, peuperial sepsis, low birth weight and preterm birth. However, the study reported that some women may experience strong craving (pica) for ordinary soil. One of the participants believed that some pregnant women swallowed soil to prevent anaemia.

CM 5: *There are some women who eat soil (muchenje)*

CM 7: *Eating soil they say its lack of iron. So they eat in order for them to have enough blood.*

Because pregnancy represents a transition period, biologically, physiologically, socially and emotionally, close monitoring of nutrition in pregnancy is crucial. Health personnel recommend some food supplements to booster the pregnant women's nutritional input. However, some pregnant women have their own preferences. For example, a study

conducted in Paris and Aix-en-Province (Bianchi, Huneau, Goff, Verger, Mariotti & Gurviez, 2016:6) cited pregnant women indulging themselves with some food because they felt health personnel restrict them too much as they give them a list of which food to eat and which not to eat.

3.12.1.2 Use of herbs to prepare for birth

Usage of traditional medicine is prevalent in both developing and developed countries (Al-Ghandi, Aldossari, Al-Zahrani, Al-Shaalan, Al-Sharif, Al-Khurayji & Al-Swayeh, 2017; Abbott, 2014). Sooi and Keng (2013:1) posit that the knowledge of herbal medicine has been gained through observations, experiences gained from practical use and from rituals passed from one generation to another.

In this study, participants across the groups overwhelmingly cited use of herbs during pregnancy and labour to facilitate the opening of the birth canal in preparation for delivery, to speed up delivery and to ensure women are not operated on. To facilitate easy passage during delivery, women used different types of herbs during pregnancy and immediately before delivery. The following quotations reflect the participants' views on the use of herbs before and during childbirth:

CM 8*: What happens in the community is that when a daughter in-law comes, they are some African medicine (mushonga) that they are given which is called mushonga wemasuwo [medicine to open the birth canal]. The reason women are given the herbs is for them to deliver without problems. No stitches will be performed on them [episiotomy].*

CM 7*: Women drink tea leaves (musvisvinwa). The tea does not cause any harm. Even myself actually use it as tea leaves daily. There is another one that they call batavana. It is soil that is taken and is mixed with traditional brewed drink (maheu) and they drink the mixture. It does not have effects. One drinks it like a drink.*

PNW 1: *One is encouraged to drink wild tree leaves called makoni to open the birth canal (kugadzira nzira), so that you will not have problems during delivery.*

MHCP 2***: They use herbs. Even us when we started giving birth, we were given these herbs. Some are taken as African drinks (maheu).***

These findings are consistent with studies done in rural Tanzania by Siajabu (2009:34) and August, Pembe, Kayombo, Mbekenga, Axemo and Darj (2015:7) in which most women used herbs to facilitate labour and prevent prolonged labour respectively.

Different countries have different traditional practices. For example, Asante-Sarpong, Onusu, Saravanan, Appiah and Abu (2016) reported that in Ghana, to open a mother's womb, a gun would be fired or a dog's sound would be initiated.

3.12.1.3 Other indigenous practices to speed up labour

Participants in this study highlighted different types of indigenous practices used to augment labour. The most common herb used in childbirth was elephant dung.

MHCP 7: *They also use elephant dung/ droppings. Although it is not found in this part of the country, women will have it in bags having fetched it from Kariba.*

MHCP 5: *One can also take elephant dung to speed up delivery. Others drink water mixed with soil taken from the soil where a mole was lying down (ivhu renhuta) or soil from where a hare was sleeping. They say a hare or mole suddenly jumps up from sleeping and runs fast hence the woman will have a sudden delivery. The soil where the hare was lying down is taken and mixed with water and the water is drunk.*

Consistent with these findings, Huang and Mathers (2010:243) reported that women in a study done in United Kingdom, used raspberry leaf tea or camomile tea after birth to calm down and to avoid indigestion. It is important to document commonly used herbs and practices in Mhondoro-Ngezi in order to preserve the indigenous knowledge system. However, there is need for further research on the safety and efficacy of these herbs to ensure well being of the mother and the baby.

3.12.1.4 Indigenous practices to prevent complications for mother and baby

There was trust in indigenous practices to the extent that women believed that they prevented them from having complications in pregnancies. For example, participants reported that women used a donkey's placenta during delivery to prevent complications.

MHCP 5: *I was supposed to go for an operation. They had told me that I had male bones so I would not deliver at all, the same way others do. I would continue having operations. So I put the donkey's placenta (musana wedhongi), during labour on my tummy and I delivered normally. I never had any operations with all my seven children.*

MHCP 7: *The donkey's placenta (chevakuru chedhongi) is what she means. They take dried donkey's placenta and put in on their tummy. Women believe that since a donkey delivers normally without any problems, the same thing will happen to them.*

MHCP 5: *They dry it and one would mix it with water drink it. I drank it*

Use of herbal medicine is prevalent worldwide. In South Africa (Ngomane et al, 2010:5), Saudi Arabia (Al-Ghamdi, Alsossari, Al-Zahrani, Al-Shaalan, Al-Sharif, Al-Khurayji & Al-Swayeh, 2017:3) and Lao People's Democratic Republic (Lamxay, de Boer & Bjork, 2011:4) studies also reported that women use herbs to ease and accelerate labour. Similarly, in Malaysia, Sooi and Keng (2013:3) revealed that women used a variety of herbs according to the trimester of pregnancy, with the majority (89.2%) using herbs to facilitate labour.

3.12.2 Religious beliefs and practices

Participants reported that women who belonged to the Apostolic churches used holy objects and fluids and their fists to strengthen the pregnancy and stretch the perineum respectively. Table 3.19 summarises religious beliefs and practices.

Table 3.19: Religious beliefs and practices

	Antenatal	**Intrapartum**	**Postnatal**
Religious beliefs and practices	Use of holy objects and fluids	Use of holy objects and fluids	Use of holy objects and fluids
	Practices to stretch the perineum		

3.12.2.1 Using of holy objects and fluids

There has been a growing interest in the relationship between spirituality, religion and health. Literature has cited how spirituality/ religiosity can improve recovery from illnesses. For example, Ho, Chan, Lo, Wong, Chan, Leung and Chen (2016:5) cited how patients with schizophrenia regarded spirituality as an inherent part of their well-being and rehabilitation.

Participants reported that members of the apostolic sect use holy water and oil prayed for *(muteuro)* to stabilise pregnancy, to cast evil spirits, for purification, to turn the baby's position and to relieve any pain.

PNW 3: *We use water or oil that has been prayed for from the shrine (munamato wekumasowe). The water or oil that has been prayed for helps in that, if the baby was not moving, it will turn. Or sometimes one can feel pain on this side, if you drink it (munamato) even when delivering, you can deliver well without any problems.*

PNW 2: *Yes we use that. We drink in the morning, afternoon and evening. We drink warm water, so that the baby comes out strong.*

MHCP 6: *They say the Holy water or oil (munamato) should not be mixed up with anything else. Others use water, others use stones and others use leaves that have been prayed for*

at their church for healing and any other issues. So the prophets say those should not be mixed with the medicine that is given at the clinic.

Consistent with these findings, Kutsira (2013:19) reported that Johane Marange pregnant women in urban Harare used water and stones (which they called *muteuro*) that were prayed for by their prophets for protection and guidance.

The use of strings as objects to wade off problems for the baby was also reported as a religious practice:

PNW 3: *What happens is that when the baby is born they say inorder to protect the baby they tire those strings. They say there is too much wind and the baby may swallow it. So they tire those strings on the baby's wrist or neck or waist line.*

Use of holy water and anointed oil by the Apostolic sect faith healers for divination and treatment for problems of spiritual in nature were also reported in Rusape district in Manicaland Province in Zimbabwe (Muzondo, 2012:46). In Ghana (Aziato, Odai & Omenyo, 2016:3) women washed their faces with blessed water, placed stickers of pastors and churches in hair nets covering their hair or rubbed water over their abdomen or placed blessed handkerchiefs under the pillow which were prayed for by their pastors for protection and to ensure safe delivery.

These findings reveal that women are exposed to a lot of issues during childbirth. The fear of negative outcomes of pregnancy compounds the use of these objects. Women should be encouraged to discuss openly these practices so that they are not shrouded in secrecy and those practices that are detrimental to health are discouraged.

3.12.2.2 Practices to stretch the perineum

Use of a fist to stretch the perineum seem to be a common practice in the community after participants reported also that culturally, women insert their fists into the vagina.

CM 5: *These religious people use soap. They go to their elderly women where they are examined. To open the way, they smear soap on their first and it is inserted inside the vagina and they take it out. The procedure is repeated until delivery. They say they are preparing the child's way.*

Consistent with these findings, a study conducted in Zimbabwe among the conservative Apostolic sect members, CCORE (2011:35) also reported that to stretch the birth canal in preparation of birth women use soap, warm water and/or insert fist into the vagina.

The above religious and cultural practices, beliefs and underlying taboos are key to the development of appropriate health education talks to enhance utilisation of maternal healthcare services during pregnancy, delivery and postnatal period.

3.13. Conclusion

This chapter presented the results of Cycle 1 of the study. These results served as a basis for the development of interventions in the next chapter, focusing on enhancing utilisation of maternal healthcare services in Mhondoro-Ngezi district by the researcher, in collaboration with community stakeholders.

CHAPTER 4

CYCLE 2: DEVELOPMENT AND IMPLEMENTATION OF THE INITIATIVES

4.1 Introduction

Chapter 3 presented results of Cycle 1, the situational analysis phase. Quantitative and qualitative data were generated and presented to CIG members in Cycle 2 where the initiatives were developed and implemented, as discussed in this chapter. The developed initiatives gave answers to the second research question which was: 'What initiatives can be developed for enhancing the utilisation of maternal healthcare services in Mhondoro-Ngezi district in rural Mashonaland West Province, Zimbabwe?' This chapter will present the activities of the CIG members and the researcher in the development and implementation of the initiatives.

Participation of communities is important in improving health outcomes and health systems. By working with communities, the interventions become more relevant to the local needs and are informed by local knowledge and priorities (George, Mehra, Scott & Sriram, 2015: 2). Hence, the study was conducted with a small group of dedicated community stakeholders, who were open to new ideas and willing to step back and reflect as they moved through phases of planning, acting, observing and reflecting in an iterative way, until every member of the group was satisfied with the change brought about by the initiatives. The CIG members managed to use the knowledge generated in Cycle 1 of the study to develop and implement initiatives to enhance the maternal healthcare services utilisation. By participating in the research, the CIG members were also able to discover skills that they did not know they had. As the CIG members critiqued the status quo and explored alternative interventions, they developed and strengthened their analytical and critical capacities.

Dialogue among the CIG members was encouraged inorder to induce critical thinking as they shared their experiences. Shona, the vernacular language, was used throughout the interactions to allow every participant to contribute without any constraints.

4.2 Recruitment of cooperative inquiry group members

In line with PAR as described in Chapter 2 and for knowledge to be generated through dialogue, the researcher presented the results of the situational analysis to community stakeholders. The situational analysis results were disseminated during community meetings, staff meetings and day to day hospital activities. For some of the meetings and activities, the researcher took advantage of existing activities, such as the Africa vaccination week; a one-day training workshop organised by the International Education

and Training Centre for Health (ITECH), where 100 community health workers in the district attended a training workshop on HIV; as well as during the training workshop on respectful maternity care held with health personnel from the district organised by the CIG members. Permission to disseminate the situational analysis to community health workers at these activities was sought from the facilitators by the researcher and verbal permission was granted.

After presentation of the situational analysis results, the researcher outlined the purpose of the study and the need to further address the identified barriers to utilisation of maternal healthcare services. Interested people were invited to come forward and work with the researcher in developing initiatives for enhancing utilisation of maternal healthcare services. Those with further inquiries and interest were asked to meet the researcher after the discussions.

After further clarifications, those who were interested in collaboration as co-researchers and co-participants were asked to meet with the researcher at St. Michaels Mission Hospital at a scheduled date and time. The recruitment of CIG members took two days. The response for participating in the study was encouraging as nine community stakeholders turned out on the first day of the CIG meeting and the tenth one, a postnatal woman came the following day. Some of the postnatal women who had shown an interest to participate did not turn up.

Ten purposively selected participants, who are addressed as CIG members in this study, were therefore selected to develop and implement context specific initiatives for enhancing utilisation of maternal healthcare services. The number of group members was in line with Mash's (2013:3) assertion that a CIG can have 10-15 people.

4.3 Demographic characteristics of CIG members

The ten purposively selected CIG members' demographic characteristics are summarised in Table 4.1. The group initially consisted of one midwife, one headman, one retired truck driver, one housewife, two postnatal women and four village health workers. Due to shortage of staff, the hospital could not spare more than two nurses for the study. Because participants were not being paid, most community members did not want to participate. One village health worker withdrew from the study during the planning stage.

Table 4.1: Demographic characteristics of the CIG members

CIG member	Age	Gender	Marital status	Level of education	Profession or role	Religion	No of children
1	69	Female	Married	Standard 2	Village health worker	Roman Catholic	4
2	42	Female	Married	Form 4	Housewife	Roman Catholic	4
3	65	Female	Widow	Standard 6	Village health worker	Roman Catholic	5
4	62	Male	Married	Standard 6	Retired truck driver	Johane Masowe Apostolic	7
5	45	Female	Married	Form 4	Postnatal woman	Johane Masowe Apostolic	4
6	50	Female	Married	Standard 6	Village health worker	Methodist	5
7	31	Female	Married	Form 4	Registered General nurse and midwife. Three years experience	Zimbabwe Assemblies of God in Africa	1
8 Withdrew	53	Female	Married	Form 4	Village health worker	Roman Catholic	3
9	78	Male	Married	Standard 6	Headman	Roman Catholic	6
10	23	Female	Married	Form 4	Postnatal woman	Methodist	1

Zimbabwe's basic education system comprises of early childhood education of pre-scholars below 6 years, a 7-year cycle of primary education with terminal examination at Grade 7 level, a 4-year ordinary level cycle and 2-year advanced cycle (UNESCO International Bureau of Education, 2001:10; EP-Nuffic, 2015:5-7). Before the adoption of this new system, the Zimbabwe primary education system was classed as Sub A and Sub B being the entry level then standard one to six as primary level then Form 1 to 6 as secondary education. Most of the CIG members were educated up to primary school level. Only two were educated up to secondary school level.

The group had a mixture of young and old people, with their ages ranging from 23 years to 78 years. Only one CIG member was widowed. The CIG members belonged to different Christian denominations as follows; 5 belonged to Roman Catholic Church, two were from the Methodist Church, two belonged to Johane Masowe Church and one was from the Zimbabwe Assemblies of God Church in Africa (ZAOGA). All the CIG members had children, ranging from one to eight per member.

4.4 CIG Processes - Cycle 2

The CIG went through phases of reflection and action back and forth, making sense of their experiences on one hand and developing and implementing the initiatives on the other

hand, thereby initiating social change. The results of the reflections fed back into the process to inform the next phase. The following section will discuss how the initiatives were planned, implemented and evaluated.

4.4.1 Planning and implementation

The CIG members as co-researchers assembled to explore initiatives from the results of the situational analysis for enhancing utilisation of maternal healthcare services at St. Michaels Mission Hospital, in Mhondoro-Ngezi district in Mashonaland West Province.

On the third day after the initial recruitment contact, the CIG members and the researcher held the first meeting. The initial meeting started at 09:00 in the St. Michaels Mission Hospital cafeteria. The venue was allocated to the group by the hospital authorities and because it was neutral and away from day to day activities of the hospital, the CIG members agreed to have the venue as their permanent meeting place for future meetings. However, as the study progressed, the group occasionally experienced some disturbances during staff tea breaks as the hospital personnel wanted to use the cafeteria for their tea break. After liaising with the hospital authorities, the health personnel were allocated another room for their tea breaks.

Prior to the first meeting, the researcher had prepared a draft programme so that discussions would not be done in a haphazard way. The meeting started with the researcher thanking the members for volunteering to join the study. Formal introductions were done and the researcher and the group members agreed that although they would address each other with their actual names in the meetings, their names would not appear anywhere in the study, instead numbers would be used. The researcher read the information sheet and the consent forms (Annexure C) clarifying all issues before requesting the CIG members to sign the consent form to show their willingness to participate in the study. The consent forms and information sheet were in Shona, the vernacular language. The CIG members were informed that participation was voluntary with no monetary benefits and the research was being conducted to fulfil doctoral study requirements. Risks and benefits were discussed, and it was indicated that there were no risks anticipated. The CIG members were assured that they could withdraw any time in the study without any penalties or change in the care that they received at the hospital for any reason. The CIG members signed consent forms, and each retained a copy.

When all housekeeping issues were addressed, the researcher went over the results of the situational analysis and gave the CIG members an opportunity to seek clarity. The researcher presented a literature review on factors that influenced utilisation of maternal health services globally, regionally and nationally and strategies that were developed

elsewhere for enhancing utilisation of maternal health services. A brief and simplified presentation on PAR and co-operative inquiry processes and cycles were given by the researcher, emphasising the need to work collaboratively to enhance utilisation of maternal healthcare services. Issues that were covered in the PAR process included meaning of PAR, the PAR cycles and how each cycle would be undertaken and the advantage of using PAR method. The CIG members were given information on what was expected from them as CIG members and the process. Issues that were included were what CIG stood for, what to write in their journals and the need for the members to own the study.

Each member of the group was given a pen and a note book which they used as journals for writing their experiences in the field, for sharing with other group members during subsequent meetings. The researcher also emphasised the need of all members to attend all meetings to show commitment. At the first meeting, the ground rules were agreed on.

A chairperson and a secretary were nominated by the group members and during the subsequent meetings, the chairperson chaired the meetings and the secretary wrote minutes for the meetings. The researcher was transferring power to the group in line with Mash's (2013:4) assertion that the researcher needs to transfer power and the knowledge of the research so that the group has ownership of the research.

The initial first two meetings were devoted to defining the barriers and enablers for enhancing utilisation of maternal healthcare services during pregnancy, delivery and post natal period from the situational analysis results. The CIG was divided into three sub-groups, each looking at barriers, enablers and actions to be taken during antenatal, delivery and postnatal periods respectively. The CIG members were distributed fairly in each group ensuring representation of all the stakeholders in the group discussions.

A CIG member from each group presented the feedback on the discussions on barriers and enablers to use of available resources and utilisation of maternal healthcare services and further discussions ensued on how the barriers could be addressed.

The CIG members agreed to address the barriers through the following:

- **Maternal healthcare system related barriers**

Negative health personnel attitude and poor quality of service care were revealed as some of the reasons women do not utilise maternal healthcare services. The CIG members agreed to develop a check-list to be used by maternal healthcare user to monitor healthcare personnel attitude and provision of care before they exited health facility after receiving

care. CIG members also suggested training of maternal healthcare providers on respectful maternity care and the universal rights of the childbearing woman.

- **Maternal healthcare user related barriers**

With regards to the barriers, late booking; poor ANC repeat visits and postnatal care attendances; lack of knowledge on the importance of booking early, institutional delivery and repeat postnatal care visits and transfer process, CIG members agreed to create awareness using posters they developed. In addition, the CIG members agreed to develop and implement a birth preparedness information booklet with messages emphasising on ANC and postnatal WHO recommendations and importance of utilising the services.

- **Support system related barriers**

The findings revealed poor male/partner involvement and support in maternal healthcare issues, for example refusing to be tested for HIV in the prevention of mother to child transmission of HIV programme. To address these barriers, CIG members agreed on creating awareness on the importance of male/partner involvement. The CIG members also suggested training of health personnel on issues concerning male/partner involvement because they argued that sometimes health personnel do not allow partners to be actively involved.

The study findings revealed lack of community involvement in maternal health issues and CIG members agreed to create awareness on the importance of encouraging women to utilise the services and to assist each other in emergencies.

- **Cultural related barriers**

The study findings revealed that utilisation of maternal healthcare services in the first trimester, during delivery and after delivery was affected by cultural beliefs and norms that prohibited women from moving while pregnant and during postnatal period for fear of witchcraft and encouraged use of herbs during childbirth. The CIG members agreed to create awareness on the importance of utilising services and disclosing use of herbs during childbirth. They also agreed to engage hospital authorities on initiating and scaling-up home visits by health personnel.

- **Religious related barriers**

To address Apostolic and Roman Catholic church doctrines that prohibited church members from seeking healthcare services and issuing of contraceptives at the mission

hospital respectively, the CIG members suggested engagement of religious leaders and Zimbabwe National Family Placcing Council and plan a way forward.

The CIG members used the above results of the situational analysis to determine what the implementation should entail, as discussed in the next session.

The awareness on the developed posters and birth preparedness booklet was conducted during the months of June and July 2017 and the CIG members agreed on ongoing evaluation to ensure the findings were fed back into the study. The researcher and the CIG members agreed to create awareness during community meetings organised by the community leaders, door to door campaigns and to people seeking services at the hospital.

The reason why the CIG members and the researcher did not organise their own community gathering is because the CIG members had pointed out that community members usually do not attend gatherings where there were no handouts. One community gathering was organised by the councillor but unfortunately, he refused to allow the CIG members to speak at the gathering.

To progress with the study, instead of waiting for an opportunity for a community gathering, the researcher and the CIG members agreed to make use of each encounter with pregnant women, men and community members in the community, at shops, at the hospital and in their respective churches.

Ten posters were printed for each message. The group agreed that the posters be displayed around the clinic, especially at the Family Health Clinic where antenatal care and postnatal care visits were conducted, in the labour ward and on shop walls in the community. Other posters were given to the hospital immunisation outreach team to display as they moved around during other outreach programs. Eleven birth preparedness information booklets were used during the awareness campaign one for each CIG member and the other two were used by hospital health personnel during the antenatal and postnatal booking and repeat visits respectively. Additional 30 birth preparedness information booklets were distributed to all clinics in the district after the district nursing officer requested that all health facilities in the district should adopt the booklets. The village health workers working in and around St. Michaels Mission Hospital were also given the information booklets to use during community visits.

A participatory and interactive way of sharing health information was also reported to yield positive outcomes with hypertensive patients at a community health services centre of

Liabu Town, in China (Lu, Tang, Lei, Zhang, Lin, Ding & Wang, 2015:8). In the study, there was a marked improvement on hypertension related knowledge following the intervention.

Results of the situational analysis revealed that members of the Johane Marange Apostolic Faith sect did not utilise healthcare facilities. The CIG members initially agreed to arrange a meeting with religious leaders and health officials to address the religious barriers. However, during subsequent discussions, the CIG members agreed that the Apostolic sect members did not reside in the district but at the border with Seke district and due to transport logistics problems, the issue should be referred to Murambwa Clinic health personnel for follow-up. The sister-in charge at Murambwa Clinic was consulted and he agreed to follow-up the issue, no feedback was given up to the time of write-up.

In this study, observation implied monitoring of the implementation of the developed initiatives, with what, how often and with what data gathering techniques. Maternal health personnel attitudes were monitored using the check-list developed by the CIG members with input from literature (Annexure H). The check-lists were distributed to women seeking maternal healthcare services at St. Michaels Mission Hospital as and when they came. The check- lists were given to the women before they left the hospital and after having received maternal healthcare services. After completing the forms, the forms were stapled in the presence of the woman and were collected by CIG member 7. The CIG member kept the compiled forms until the next meeting with the rest of the other members of the group for analysis and feedback.

The feedback from the check-list on health personnel attitude after training of the midwives indicated varying responses from women, with some being satisfied with the services offered and others not. On those who provided some additional comments, indicated persistence of negative health personnel attitude.

From the initial discussions it was agreed that since slight changes had taken place the check-list would be redistributed and administered by the clinical nursing officer until health personnel had improved their attitude towards clients and this would be shown by positive comments on the returned check-lists.

Awareness campaign on male partner involvement, recommended initial ANC visit, contact repeat ANC visits, post natal visits and the importance of maternal healthcare services was monitored by the CIG members themselves as they implemented the initiatives. The CIG members recorded their experiences and maternal healthcare service users and community members' feedback in the personal journals, which were in turn shared with others during the CIG meetings. During the CIG meetings, there was an open discussion. The researcher

as the facilitator made sure the atmosphere allowed expression of ideas and individuals respected each other's contributions. The CIG members as co-subjects became fully immersed in the action and experience as suggested by Reason and Bradbury (2001:179). This was important as the quality of the research depended on their ability to witness the process themselves (Mash, 2013:4). CIG members' reflections are discussed in chapter 5.

4.4.2 Acting

In this study, acting referred to the development and implementation of the initiatives. The CIG members became the co-researchers as they engaged in the action they had agreed on. The CIG members and the researcher collaboratively explored initiatives for enhancing utilisation of maternal healthcare services and agreed on tasks to undertake. They observed and recorded the processes and the outcomes of their own and others' action and experiences in their journals. The CIG members were encouraged to be open to other developments that could emerge as they created knowledge. Table 4.2 shows the workshops and meetings conducted during the CIG engagement.

Table 4.2: Summary of the CIG workshops and meetings

Date	Type of meeting	Description
26 -29 April 2017	Orientation of the CIG members to the inquiry	• Present results of the situation analysis to the CIG members. • Train CIG members on the PAR process • Formulate group norms • Allocate individual roles and responsibilities • Develop the initiatives
18 May 2017	Development of initiatives	Feedback from group members on progress on development of check-list, posters and birth preparedness information booklet
2 June 2017	Development of check-list, posters and birth preparedness information booklet	Present, check-list, posters and birth preparedness information booklet to the group for initiation of the awareness
9 June 2017	Training of health personnel	Train maternal healthcare providers on respectful maternity care and the rights of a childbearing woman
19 June 2017	Evaluation of maternal healthcare providers' attitudes	Feedback findings of evaluation of maternal healthcare attitude into the study
20 July 2017	Evaluation of awareness campaign	Community members were receptive of the information booklet and messages on posters

In the next sections, the researcher will highlight the development, implementation and evaluation of the initiatives.

4.4.2.1 Posters to create awareness on male partner involvement

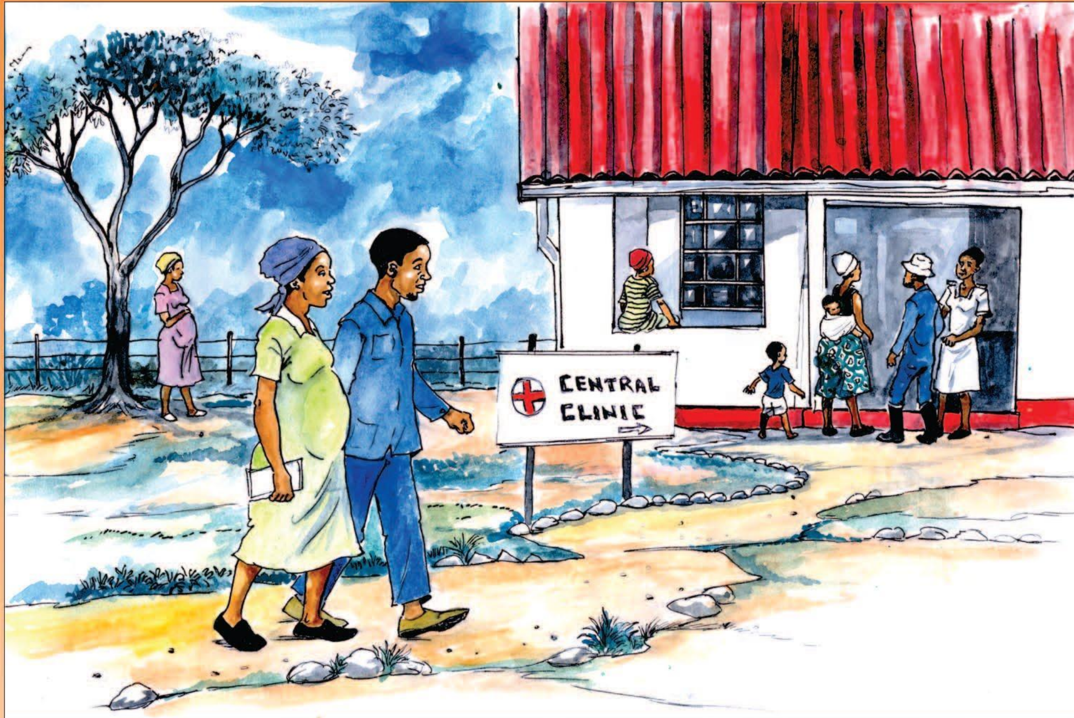
The CIG members agreed to create awareness in the community on the importance of male partner involvement during pregnancy, delivery and postnatal period using posters developed by the members themselves. The members suggested the need for the maternal healthcare providers at the hospital to be trained on male partner involvement because the CIG members argued that some health personnel did not allow partners to be present when they are providing maternal healthcare services to their wives.

The CIG members revisited the situational analysis results and agreed to create awareness on male partner involvement in maternal health issues. They critiqued the messages that had been suggested by participants during the situational analysis. The message that stood out on male involvement was: MEN SHOULD BE IN THE FOREFRONT of maternal health issues. Two male CIG members were tasked to engage other males in the community on how they wanted the messages on the posters to be phrased. After the feedback, the CIG members agreed on the messages to be inserted on the posters. The CIG members suggested posters to have drawings with a husband accompanying their pregnant wife to hospital or clinic on one poster and on the other poster, both the husband and the wife were drawn booking for maternal healthcare services.

After much deliberation, the messages that were finally agreed on were: ''responsible men accompany their partners for pregnancy booking''; ''men are also wanted during booking''; and ''maternity booking and care is free'' and these messages are depicted in Figures 4.1 and 4. 2 as well as Annexure G.

The posters were designed by a graphic designer with input from CIG members and the Ministry of Health and Child Care Health Promotion Department. Figures 4.1 and Figures 4.2 show the messages on poster 1 and English translation respectively.

MURUME CHAIYE ANOENDA NEMUDZIMAI KUNONYORESA PAMUVIRI



Kuenda kunonyoresa pamuviri pasati padarika mwedzi mitatu zvakanakira kuti:

- Mai vanenge vaine dambudziko vanokurumidzwa kuonekwa vobatsirwa nekukasika.
- Zvimwe zvirwere zvinenge zviripo nezvisingazivikanwe zvinobva zvaonekwa zvorapwa.
- Mai nemwana vanoongororwa hutano hwavo.
- Mai nababa vanopihwa dzidziso maererano nezvepamuviri zvino sanganisa kudya kunotarisirwa kune madzimai anepamuviri, matambudziko avanga sangana nawo vaine pamuviri uye nekuti vanobatsirwa sei nekugadzirira zvingadiwe kana vasununguka.

Figure 4.1: Poster 1 on male involvement-Shona version

RESPONSIBLE MEN ACCOMPANY THEIR PARTNERS FOR PREGNANCY BOOKING

Initial booking before three months is beneficial because of the following:

- If a pregnant woman is having some problems, there is prompt intervention.
- Other diseases that may not be known can be detected and attended to.
- Both the pregnant woman and the unborn baby will be screened for any other problems

Both the pregnant woman and her partner will be given information on the pregnancy, including recommended nutrition in pregnancy, tests to be done, complications that the woman may encounter and birth preparation.

Figure 4.2: Poster 1 English translation

Posters 1 and 2 relating to male involvement and the picture were to be the same except the wording message on male involvement. After some discussions the CIG members and the researcher agreed that a poster with the message ''men are also wanted during booking'' be left out from the awareness because the message was not clear. The final poster that was adopted for the awareness is depicted in Figure 4.1 and Annexure G.

4.4.2.2 Poster to create awareness on non-payment of maternity care

The results of the situational analysis also indicated that maternal health users and the community assumed that maternity care was paid for, yet in rural areas it was provided for free. Therefore, the CIG members agreed to create awareness using a poster to convey the message that maternity care was free up to six weeks after delivery in rural health centres as per government policy.

After discussions with the Ministry of Health and Child Care health promotion manager, he pointed out that the word 'pachena' in Shona has different meanings and might confuse the women. After the researcher shared with CIG members his insight, the CIG members agreed to replace 'free' with 'maternity care is not paid for'.

Using the same guidelines recommended by the Ministry of Health and Child Care Health Promotion Department, the poster was developed as illustrated in Figure 4.2.

KUNYORESA PAMUVIRI PACHENA HAMUBHADARE

Mai vaka zvitakura vanotarisirwa:

- Kunyoresa pamuviri mwedzi mitatu isati yadarika.
- Kudzoka kukiriniki kuzoongororwa hutano hwavo nemwana kanosvika kasere.
- Kusunungukira kukiriniki kwavanopihwa rubatsiro nekukasika.
- Kudzokera kukiriniki kunoongororwa hutano hwavo nemwana kana vasununguka pamazuva echinomwe uye pamavhiki matanhatu.

Figure 4.3: Poster 2 on Free Maternity Healthcare (Shona)

MATERNITY BOOKING IS NOT PAID FOR

A pregnant woman is expected to:

- Book early before three months
- Return for review for at least eight contacts
- Deliver at a health facility where there is timely intervention
- Return for review after delivery at seven days and six weeks.

Figure 4.4: Poster 2 English translation

The final posters that were used to create awareness are shown in Annexure G.

4.4.2.3 Birth preparedness information booklet

The results of the situational analysis revealed that pregnant women booked late, few women attended four or more ANC repeat visits and few women returned for postnatal care at seven days, ten days and six weeks. The CIG members unanimously agreed on creating awareness using posters written in vernacular language specific to the area emphasising the WHO (2016) recommendations and importance of these visits. Discussions ensued, and the CIG members agreed to create awareness on recommended schedules and importance of initial booking, number of contact visits, institutional delivery and postnatal repeat visits using a birth preparedness information booklet (Figure 4.3).

The messages that were developed were derived from the gaps that had been highlighted in the situational analysis as well as those that emerged during CIG members' meetings. One such message that emerged from the meeting was that, women were throwing away iron tablets because of the side effects. In addition, the results of the situational analysis revealed that out of the 20 still births in the district, 11 were macerated deaths and the group members felt there was need to create awareness on the importance of monitoring foetal well being at home. Inclusion of severe headache and blurred vision were also done to alert women of signs of pre-eclampsia and the need to seek care promptly. This was because the cause of death of one of the women who was followed up at the central hospital was hypertension which complicated to eclampsia due to first delay causes in seeking maternal health care services. Initially, the CIG members had inserted a statement advising women to call for an ambulance when there was an emergency at home, but it was later deleted because the hospital does not have an ambulance. The birth

preparedness information booklet is included as Figure 4. 4 in Shona and the English translation as Figure 4.5, it is also attached as Annexure I.

MASHOKO EKUBATSIRA PANGUVA MAI VAKAZVITAKURA

Gwaro iri chinangwa charo ndechekukupai mashoko ekukubatsirai apo mai vanenge vakazvitakura, vachisununguka uye vasununguka. Tinovimba kuti mashoko aya achakubatsirai kuti muzive zvakakoshera kushandisa zvipatara, rubatsiro rwamuno wana kuchipatara uye zvamuno tarisirwa kuita kuti hupenyu hwaamai nemwana husapinde munjodzi.

PANGUVA MAI VAKAZVITAKURA

Baba namai vanokurudzirwa kuenda kuchipatara kunonyoresa amai vasati vasvika mwedzi mitatu kuitira kuti kana paine dambudziko vakasikwe kuonekwa vobatsirwa. Vana baba vanokurudzirwa zvikuru kupa ritsigiro kunana mai panguva iyi kuitira kuti hukama hwemhuri yese hunge hwakasimba.

Zvamunofanirwa kuitirwa kana maenda kuchipatara

Mai nababa vanokwaziswa vopihwa pekugara munzvimbo yakasununguka yavano kwanisa kutaura vasingatye kuti vamwe vanganzwe. Mai vakazvitakura vachabvunzwa mibvunzo iyo ichabatsira kuti rubatsiro rwavanopihwa rwuve rwepamusorosoro. Munofanira kuva makasununguka kupa rondedzero yakakwana kuitira kuti kana paine zvimwe zvingade kuziva vana mukoti vazvizive. Izvi zvinobatsira kuti vakwanise kukupai rubatsiro rwepamusososoro. Vmushure mekunge vana mukoti vakumbira mvumo yenuy imi mukatendera, mai vachatariswa kuti mwana ari mudumbu arikukura zvakanaka here. Vana mukoti vanoteerera mwana padumbu uye nekuona kuti mwana arikukura zvinoenderana nemwedzi yepamuviri, vachatarisa kuti mwana akagara zvakanaka here uye kuti mai vangakwanise kusununguka mwana zvakanaka pasina kuchekwa. Bp nehuremo hwamai huchatariswapesi panouya mai kukiriniki. Panouya mai pekutangisisa vachatorwa ropa rekutarisa kuti havana zvirwere here zvingangokanganisa hutano hwavo. Zvinotariswa muropa ramai zvinoti utachiona hweHIV, zvimwewo zvirwere zvepabonde uye kuti pane ukama here pakati peropa ramai neremwana. Mai vane pamuviri pasina dambudziko vanokurudzirwa kuuya kuzoonekwa kuchipatara nguva inokwana **rusere (8)**.

Baba vachatariswawo BP yavo nehuremo hwavo pasikero pavanoouya namai kukiriniki.

Zvakanakira kunyoresa

- Munyoresa pachena
- Hutano hwamai, baba nemwana hunoongororwa
- Kuongororwa uku kuno kwanisa kuburitsa zvimwe zvirwere zvanga zvisingazivikanwa zvobatsira kuti zvirapwe nguva ichiripo.
- Mai nababa vachapihwa dzidziso yezvavanofanirwa kutevedzera.

Matambudziko anokwanisa kusangana namai vakazvitakura

Kana mai vaka zvitakura vakaona zvinotevera vanofanira kuenda kuchipatara nekukasira:

- Kubuda ropa kana mvura
- Kusatamba kwemwana ari mudumbu. Mwana ane hutano hwakanaka mudumbu anofanira kutamba nguva zhinji zvakaita serusere kana gumi nemaviri pazuva.
- Kurwadziwa nemusoro zvakanyanyisa vachiona nyeredzi nekugwinha
- Maronda kana kuona zvinobuda panhengo dzechidzimai

PANGUVA YEKUSUNUNGUKA

Zvakakosha kuti mai vakazvitakura vasunungukire kuchipatara kana kukiriniki. Kana mai vachigara kure nechipatara uye vaine matambudziko avakambosangana navo kana kuti mimba yavo ndeyekutanga kana yachishanu zvichikwira zvino kurudzirwa kuti vaende kunogarira kuchipatara pamwedzi minomwe (7). Zviratidzo zvekuti nguva yekusununguka yasvika ndezvinoti:

- Kubuda shupa
- Kurwadziwa nemusana dumbu rechisunga

Baba vachatariswawo BP yavo nehuremo hwavo pasikero pavanoouya namai kukiriniki.

Zvakanakira kunyoresa

- Munyoresa pachena
- Hutano hwamai, baba nemwana hunoongororwa
- Kuongororwa uku kuno kwanisa kuburitsa zvimwe zvirwere zvanga zvisingazivikanwa zvobatsira kuti zvirapwe nguva ichiripo.
- Mai nababa vachapihwa dzidziso yezvavanofanirwa kutevedzera.

Matambudziko anokwanisa kusangana namai vakazvitakura

Kana mai vaka zvitakura vakaona zvinotevera vanofanira kuenda kuchipatara nekukasira:

- Kubuda ropa kana mvura
- Kusatamba kwemwana ari mudumbu. Mwana ane hutano hwakanaka mudumbu anofanira kutamba nguva zhinji zvakaita serusere kana gumi nemaviri pazuva.
- Kurwadziwa nemusoro zvakanyanyisa vachiona nyeredzi nekugwinha
- Maronda kana kuona zvinobuda panhengo dzechidzimai

PANGUVA YEKUSUNUNGUKA

Zvakakosha kuti mai vakazvitakura vasunungukire kuchipatara kana kukiriniki. Kana mai vachigara kure nechipatara uye vaine matambudziko avakambosangana navo kana kuti mimba yavo ndeyekutanga kana yachishanu zvichikwira zvino kurudzirwa kuti vaende kunogarira kuchipatara pamwedzi minomwe (7). Zviratidzo zvekuti nguva yekusununguka yasvika ndezvinoti:

- Kubuda shupa
- Kurwadziwa nemusana dumbu rechisunga

Zvakanakira kusunungukira kuchipatara

- Kusunungukira kuchipatara mahara
- Kana paine dambudziko kumwana namai zvino kurumidzwa kugadziriswa nekuti mwana namai vanenge vachiongororwa navana mukoti vachishandisa michina yavo.
- Mai vano sunungukira pakachena zvinoita kuti vasa batire hutachiwana.
- Mai vakarasikirwa neropa rakawanda vanokwanisa kuwedzerwa ropa nekupihwa diripi iro risingawanikwe kumba.
- Munopihwa birth record rekuti zvive nyore kutorera mwana wenyu gwaro rekuzvarwa (birth certificate).

PANGUVA MAI VASUNGUNGUKA

Kana mai vasununguka mwana achatariswa kuti paonekwa kana paine zvisina kumira zvakanaka. Zuva rinotevera mai vachibva kusununguka ivo nemwana vachaongororwa zvakare kuti hapana matambudziko nehutano hwavo here. Mai nemwana vachagara muchipatara mazuva matatu vachiongororwa nekubatsirwa pakuchengeta mwana. Izvi zvinoitirwa kuti kana paine matambudziko akurumidze kuonekwa rubatsiro rwopihwa nekukasira.

Nguva inotarisirwa kuti baba, mai nemwana vadzoke kuchipatara

Pamazuva manomwe: Mai nababa vese vachatorwa BP netemperature uye vachabvunzwa kana vaine matambudziko avari kusangana nawo. Mai vachatariswa mhando nehuwandu hweropa ravari kubuda kuitira kuti kana zvisina kumira zvakanaka vanobva vapihwa rubatsiro nekukasira. Kana mai vaine masitichi vachatariswa kuti arikupora zvakanaka here. Hukama hwaamai nemwana huchaongororwa zvakare. Mwana achatariswa kuti pane zviri kunetsa here uye kuti ari kuyamwa zvakanaka here.

Pamasvondo matanhatu: Baba, mai nemwana vachaongororwa hutano hwavo zvakare. Mwana achatariswa kuti arikukura

zvakanaka, kuti arikuyamwa zvakanaka here uye achabaiwa nekudonhedzerwa majekiseni ekudzivirira zvirwere. Baba namai vachadzokororwa kutorwa ropa rekuongorora hutachiona hweHIV. Kana ropa ramai nababa rikaonekwa riine hutachiona vachaiswa pamishonga uye vachapihwa dzidziso maererano ekurarama nehutachiona. Mwana achatorwa ropa pachitsitsinho kuti aonekwe kuti haana kubatira hutachioina hweHIV here. Kana mwana achinge aonekwa aine hutachione hweHIV achipihwa mushonga waanenge achifanirwa kunwa. Mai nababa vanobva vapihwa dzidziso inoenderana nezvaonekwa.

Mamwe mashoko anga kubatsirei

Zvakakosha kuti baba namai mushande pamwe chete navana mukoti. Kana muine dambudziko uye kana kusafara nemabatirwo amunenge maitwa makasununguka kukumbira kutaura nemukuru wechipatara kana kunyora mubhokisi rezvichemo riri pakiriniki.
Kana pamuviri parwadza muri kumba nhamba dzeamburenzi dzamunokwanisa kuridza ndedzidzi:

4

Figure 4.5: Birth preparedness information booklet (Shona version)

IMPORTANT INFORMATION TO ASSIST DURING PREGNANCY

This information booklet's purpose is to share important information to assist women during pregnancy, delivery and postnatal period. We hope the information in this booklet will assist you in giving you information on the importance of utilising maternal healthcare services and care that you will receive at the health facility and what you are expected to do to ensure a positive outcome for both the mother and the baby.

DURING PREGNANCY

Both the father and the mother are encouraged to book early at the nearest health facility **before the pregnancy is three months old** to ensure timely intervention if there is a problem. Men are strongly advised to offer support to women during pregnancy, delivery and in the postnatal period and beyond so that the family bond is strengthened.

Services that you should expect at a health facility

Both the father and the mother are greeted and offered somewhere to sit where they are free to speak in privacy. A pregnant woman shall be asked some questions in relation to her pregnancy that will assist in the provision of care. You should feel free to give full and complete information so that the maternal healthcare provider will be better informed. This is important in order for them to be able to provide you with quality care. After the health personnel have sought your permission and you have consented, the pregnant woman shall be examined to assess the baby's well being. The nurses will listen at the abdomen and check if the baby's growth is corresponding to the months of the pregnancy, the position of the baby and whether the mother can have a normal delivery or an operation. The mother's blood pressure and weight are checked every time they come for check-up. During the initial visit, the pregnant woman will have some investigations done to rule out any diseases that may affect the mother or the baby's health. Blood tests are taken to check for HIV and sexually transmitted infections and Rhesus factor. Pregnant women are given some tablets which they should drink as prescribed by the nurse. Some of the tablets assist in increasing the blood production and to prevent unborn baby abnormalities. Pregnant women who are not experiencing any problems should return for check up for at least **eight (8)** times or more.

In addition, the father will have his blood pressure and weight checked every time they accompany their pregnant wife to hospital/ clinic.

Benefits of booking

- Booking is not paid for

The health status of the father and mother will be checked

- Screening of health status may reveal some diseases that were not known and they will be attended to promptly.
- Both the mother and father will be given information on what they should do to ensure a positive outcome.

Problems that a pregnant woman may encounter

If a pregnant woman notes the following, she should go to the clinic urgently:

- bleeding or draining water
- Absence of baby movements. A healthy baby should have more than 12 baby movements a day.
- Severe headache with blurred vision, dizziness, swollen face and lower limbs, epigastric pain and fits.
- Sores on the private parts
- smelling discharge from the private parts

DURING DELIVERY

It is important for pregnant women to deliver at the hospital or clinic. If the pregnant woman lives far away from the hospital or once experienced some problems with previous pregnancies or it is a first pregnancy or the fifth and above, she is encouraged to go and stay at the mother's waiting home when the pregnancy is seven (7) months. Signs that show that labour has started are:

- breaking of waters (draining of water)
- severe backache and contractions

Why it is important to deliver at hospital

- Delivering at clinic is free, you do not pay.
- There is timely intervention if there is a problem to the mother and/ or the baby because the nurse will be continuously monitoring the mother using modern equipments.
- The woman will deliver in a clean environment and she will not be exposed to infection.
- If the woman loses a lot of blood, she will be given some blood and have drips put up which cannot be done if the woman delivers at home.
- After delivery, a birth record is issued which will be very useful for obtaining a birth certificate.

DURING POSTNATAL

After the woman has delivered, the baby will be examined to rule out any abnormalities. The following day after delivery, both the mother and the baby are examined again to rule out any problems that may have developed after the initial examination. Both the mother and the baby will stay in the hospital for three days where they will be monitored and assisted with taking care of the baby. This is done to ensure that if there are any problems they are detected early and interventions will be initiated promptly.

Expected return visits for the father, mother and the baby

On the seventh (7th) day: both the mother and the father will have their blood pressure and temperature checked. They will also be asked if they have any problems. The mother will be examined, checking the

nature and amount of blood being discharged so that if there are any problems interventions can be initiated promptly. If the mother has some stitches, the nurse will check to see whether they are healing well. Parental bonding will be assessed, and parents will be assisted where necessary. The baby will also be examined from head to toe and assessed on whether it is breast feeding well.

At six (6) weeks: The father, mother and the baby will be examined again. The baby will be weighed to check if she/he is growing well. The nurse will also check if the baby is feeding well depending on the preferred feeding practice. The baby will be immunised using the recommended scheduled. The father and the mother will have a repeat blood test to rule out HIV. If they are positive, they will be commenced on medication and counselled on positive living. The baby will have blood taken on the heel to check for HIV. The baby is given some medicines if found positive. Health education talk is given depending on the HIV results.

Important information to help you

It is important for the father and mother to work together with nurses. If you have any problems or are not happy with the care received, kindly ask to see the matron or insert your complaints in the suggestion box at the clinic.

- Arrange in advance transport to take you to the clinic when labour pains start.

Figure 4.6: Birth preparedness information booklet (English translation)

Dissemination of the information booklet

The CIG members wanted the birth preparedness information booklet (see Annexure J) to be issued to all pregnant women during the initial booking so that they could refer to the book at home whenever necessary. Due to lack of funding to produce the birth preparedness information booklets, the CIG members and the researcher revisited the suggestion. The birth preparedness information booklets were supplied to all the 10 village health workers around St. Michaels Mission Hospital community to use during their routine community visits and the other birth preparedness information booklets were used at the antenatal and postnatal clinic by nurses during health education talk sessions. All the CIG members had a copy each of the birth preparedness information booklets to use during the awareness campaign and thereafter. Some CIG members suggested that the birth preparedness information booklet should be issued by midwives while others argued that since the village health workers resided in the community and were already involved in health promotion programs, they were better situated to use the birth preparedness information booklets as they continued with their usual community work. One of the CIG members remarked: *'The book belongs to us! The work is ours!'*

There was a lot of discussions intertwined with disagreements, humour and hope during these discussions. Out of these discussions, the CIG members eventually compromised, and the birth preparedness information booklet was to be used by the village health workers to assist them in mobilising women of child bearing age to utilise maternal healthcare

services and at the hospital to complement the health education talks that are given by maternal healthcare providers to maternal healthcare users. Community members and postnatal women who were part of the CIG were also tasked to use the birth preparedness information booklet in their communities to create awareness on the raised issues.

4.4.2.4 Monitor maternal health personnel attitudes

To address the negative maternal healthcare providers' attitudes, the CIG members agreed to develop a check-list to be used by maternal health-care services users to assess and monitor maternal healthcare personnel's attitudes. The developed check- list would be used before and after training of health personnel on respectful maternity care and the rights of the childbearing woman. The analysis of the check-list would be ongoing and feedback would be fed back into the study and shared with the staff.

The findings of the situational analysis showed that women were disrespected and treated unprofessionally by maternal healthcare providers when seeking maternal healthcare services. WHO (2015:1) notes that abuse and disrespect of women during childbirth are a violation of their human rights and compromise their right to life, health, bodily integrity and freedom from discrimination. To address poor healthcare personnel attitudes and to ensure women's rights were respected as they sought maternal healthcare, the CIG members agreed to monitor interpersonal interaction of maternal healthcare providers with women seeking maternal healthcare services at St. Michaels Mission Hospital. The researcher and CIG member 7 were tasked by the group to provide literature on the best way to monitor health personnel attitudes.

During the feedback meeting, the researcher presented literature on White Ribbons Alliance Universal Rights of Childbearing Women (White Ribbons Alliance, 2011) to the CIG members which the researcher and CIG member 7 had compiled from literature. The CIG members used the literature to develop a check-list (Annexure H) which was used by maternal healthcare services users to give feedback to the CIG members and hospital staff on the care given during their interaction with maternal healthcare providers during the month of June and July 2017.

The White Ribbons Alliance Universal Rights of Childbearing Women (White Ribbons Alliance, 2011) were adapted to suit the context and used to create awareness on the rights of childbearing women among community members, women and the health care providers. Variables to include were agreed on by the group. United General Assembly (1948) defines human rights as those rights that every human being possesses and is entitled to enjoy simply by being a human being. The rights to child bearing are identified as freedom from harm and ill-treatment; right to information, informed consent and refusal and respect for

choices and preferences; confidentiality and privacy; dignity and respect; equality, freedom from discrimination and access to equitable care; right to timely healthcare and to the highest attainable level of health and liberty, autonomy, self-determination and freedom from coercion (White Ribbon Alliance, 2011:2). The CIG members agreed on inclusion of the following aspects:

- **Freedom from harm and ill-treatment**

Physical abuse of women during childbirth, especially during labour and delivery was one of the disrespected and abused categories the White Ribbons Alliance (2011:2) identified and led to the adoption of this right in the check-list.

- **Right to information, informed consent and refusal and respect for choices and preferences including companionship during maternity care**

The CIG members agreed to include the right to choose a partner during maternity care.

- **Confidentiality and privacy**

The CIG members noted that some healthcare providers at the hospital disclose private information to community members, hence they agreed to include this variable in the check-list as a way of deterring such behaviour.

- **Dignity and respect**

Dignity is at the basis of human rights principles (UN, 1949:3). Lam (2007:2) defines dignity as a state of being worthy, honoured, or esteemed and respect as an attitude of deference or reverence directed at persons not just for their gifts or status, but for their dignity as autonomous beings. In the CIG members' opinion, violation of maternal healthcare users' dignity and respect included not being seen as a worthy person, not being welcomed, ignored, not spoken to, talked over or eye contact avoided or being seen, but only as a member of a group and the individual character is denied and violations of personal space which may be culturally related.

- **Right to equality, freedom from discrimination and equitable care**

CIG members reiterated the need for health care providers to treat all women equally.

- **Right to timely healthcare and to the highest attainable level of health**

Because of long waiting time experienced by women before they receive care, the CIG members agreed to monitor how timely maternal healthcare services were offered.

- **Liberty, autonomy, self-determination and freedom from coercion**

The CIG members looked at this right in terms of detention at a health facility by healthcare providers. Following agreement on the variables to include in the check-list, the CIG members further discussed how the check-list (see Figure 4.7and 4.8) would be used and by whom.

GWARO REKUONA KUTI KODZERO DZANGU DZAZADZIKISWA

Chinangwa chegwaro iri ndechekuda kugadzirisa hukama pakati pemadzimai vakazvitakura nevashandi vezvehutano panguva madzimai vanenge vachitsvaga rubatsiro panguva vakazvitakura, vachisununguka uye vasununguka . Ivai makasununguka kutaura pfungwa dzenyu. Musaise zita renyu pagwaro iri. Zvamuchataura zvichashandiswa kugadzirisa rubatsiro rwamunowana kana mauya kuchipatara

Zita rechipatara:……………………………………………………………..

Zuva:………………………………………………………………………..

Nzvimbo (Rakidzai nekuisa X kwamapihwa rubatsiro):

(a) Kunoerwa madzimai akazvitakura (kuFamily Health Services) ☐

(b) Kunosunungira madzimai akazvitakura (labour ward/maternity ward) ☐

(c) Kunoongororwa madzimai mushure mekusununguka (Family Health Services) ☐

Rakidzai kufara kana kusafara nerubatsiro rwamapihwa nekuisa X

	Hongu	Kwete
Kupihwa rubatsiro nenguva yakakodzera		
Kuchingamidzwa		
Kupihwa pokugara Kutaurwa neni zvakanaka Kusununguka pakutaura zvichemo zvangu		
Kubatwa zvakafanana nevamwe zvisina rusaruro Kuremekedzwa Kusiiwa ndisingabatsirwe nenguva yakanaka		
Kuchengetwa kwetsindidzo yezvandataura		
Kupihwa rubatsiro pakasununguka kwandiri Kubvumidzwa kweandiperekedza kuvapowo ndichibatsirwa Kutsanangurirwa		
Kupihwa mukana wekubvunza mibvunzo		
Kupihwa mukana wekutaura zvandinoda maererano nehutano hwangu Kutukwa ndichipihwa rubatsiro Kurohwa ndichipihwa rubatsiro		

Kana pane zvimwe zvamunoda kutaura nyorai apa:…………………………………

……………………………………………………………………………………………

Mazvita nenguva yenyu.

Isai gwaro iri mubhokisi rezvichemo.

Figure 4.7: Check-list to monitor health personnel attitudes-Shona version

CHECK-LIST TO FIND OUT IF MY RIGHTS HAVE BEEN RESPECTED

The purpose of this check-list is to improve the interaction and relationship between the nurses attending to women during pregnancy, delivery and after delivery. Please be free to express your views. Do not write your name on the check-list. The information that you provide will be used to improve the way nurses treat women when they come to hospital for maternal health issues.

Name of clinic/ Hospital: ……………………………………………………..

Date: ……………………………

Place (insert an X on the place where you received care):

(a) Antenatal (Family Health Services)……………………… ☐

(b) Labour/ maternity…………………………………………… ☐

(c) Postnatal …………………………………………………… ☐

Indicate your response by ticking either YES or NO on whether the following rights were respected:

	YES	NO
Assisted on time Welcomed		
Given a place to sit before being attended to		
Spoken to politely		
Was free to say my problem Treated the same as other women and without favour Respected		
Left unattended		
Information shared with nurse kept in confidence/ secret Given care at a place that was comfortable to me My relatives accompanying me allowed to be with me Explanations were given to me		
Given an opportunity to ask questions		
Given an opportunity to say what I wanted about the care given to me		
Shouted at as the nurse attended to me		
Beaten by the nurse as he/she attended to me		

If there is anything else that you want to say, please write here……………………….

………………………………………………………………………………………………

Thank you for your time.
Kindly place the completed check-list in the suggestion box.

Figure 4.8: Check-list to monitor health personnel attitudes-English Translation

Implementation of the check-lists

On how the women would use the check-lists, the CIG members agreed that the women would tick in the box that corresponded to the care they would have received. On what to do with the completed check-list, one CIG member suggested that women can place them in the suggestion box. Since routinely the hospital authorities were mandated to open the suggestion box, some CIG members were reluctant to hand over the administration of the returned check-lists to the hospital administration, instead they agreed that CIG member 7 would administer and collect the filled in check-lists.

After drafting the check-list, the CIG members sent the draft check-list to the district medical officer, acting nursing clinical supervisor and the district nursing officer for their input and amendments and there were no changes that were suggested. The draft check-list was pre-tested for clarity and language usage on five women who had received care at the hospital. During evaluation of the pre-test, the CIG members noted that the responses were not clear and agreed that the Likert scale that was used to rate the care was too complicated for the ordinary client, hence the group agreed to rate the responses using YES or NO answers (Annexure H).

The developed check-list was used before and after training of health personnel on respectful maternity care and universal rights of the child bearing women. Evaluation of the check-list was planned to be ongoing because the information generated was agreed it would feed back into the study. The feedback from the check-list was shared with the clinical nursing supervisor who in turn discussed the results with maternal healthcare providers to improve maternal healthcare providers' attitudes towards maternal healthcare services users. CIG member 7 was tasked by the CIG members with the administration of the check-lists. The member distributed the check-lists during weekdays and weekends.

To ensure that the maternal healthcare providers had adequate and up to date information on respectful maternity care and the universal rights of the childbearing women, the researcher suggested that nurses at the hospital should be trained first and the CIG members agreed to the suggestion. A description of how the training was conducted is next.

4.4.2.5 Train maternal healthcare providers on respectful maternity care and universal rights of the childbearing woman

Nair, Yoshida, Lambrachts, et al (2014:15) observe that training of health personnel on culture sensitive communication skills, competences, attitudes and behaviours form an integral part in the improvement of health personnel attitudes towards clients. Because the

CIG members wanted to check whether there was any change of maternal healthcare providers' attitude towards women seeking maternal healthcare services at St. Michaels Mission Hospital, they agreed for the check-list to be administered to women before training of the health personnel on respectful maternity care and the rights of the childbearing woman and after training to assess if there was any change in attitude and interaction with maternal healthcare users. This initiative augurs well with the White Ribbon Alliance Safe Motherhood Initiative strategy of training all levels of health personnel on respectful maternity care (2015:3). Respectful maternity care is a universal human right which is entitled to all women during childbirth (USAID, The White Ribbon Alliance & Health Policy Project, 2013:1).

The CIG members tasked the researcher to liaise with the hospital administration on conducting a half day training workshop with maternal healthcare providers on respectful maternity care and the rights of the childbearing woman. The hospital administration agreed to arrange for the training workshop and requested the researcher to look for an external individual to train the staff. The researcher approached the White Ribbon Alliance Zimbabwe (WRAZ) and the Zimbabwe Confederation of Midwives (ZICOM) to provide the training.

WRAZ is a voluntary, non-profit making organization that focuses on maternal and child health issues, affiliated with the global White Ribbons Alliance (WRAZ Strategic Plan, 2018-2022,1). ZICOM is a professional association of midwives affiliated with the International Confederation of Midwives (ICM). Its mandate is to represent and address professional issues; provide healthcare to women, newborn and their families and collaborate with other health professionals in improving maternal, newborn and child health (ZICOM Strategic Plan 2014-2018-6).

Initially ZICOM had agreed to facilitate during the training workshop but due to commitments elsewhere, the ZICOM office provided learning materials for the training which the researcher used to train maternal healthcare providers. White Ribbon Alliance Zimbabwe provided 'Universal Rights' posters to be used during the training.

A half day training workshop was facilitated by the researcher at St. Michaels Mission Hospital. The district nursing officer mobilised nursing staff within the district to attend the training workshop. The following health institutions were represented in the training: Dondoshava Clinic, Manyewe Clinic, Manyoni Clinic, Muzvezve Clinic, Ngezi Clinic and St. Michaels Mission Hospital. Due to transport logistics, clinics that were far away from the venue failed to attend. These developments were communicated to the CIG members and the researcher was given the permission to go ahead with the training. Fourteen midwives

attended the half day training workshop. The areas covered in the training workshop included; origins and characteristics of human rights (Universal declaration on human rights) and categories of abuses and Respectful Maternity Care Charter (White Ribbons Alliance, 2011). The researcher took advantage of the maternal healthcare providers training workshop to also share the results of the situational analysis and to show the midwives the draft check-list, posters and the birth preparedness information booklet and how they would be used.

The midwives shared their experience in labour as they discussed the universal rights during the training workshop. The following aspects were addressed:

- **Abuse of women**

During presentation on freedom from harm, the midwives confirmed that some maternal healthcare providers physically abuse women during delivery. Sometimes women who are unkempt are asked to bath first before being attended to or slapped if deemed uncooperative or exposed to inhuman and shameful practices. Despite these negative behaviours and practices, the midwives commented that some women think they are being favoured otherwise they would have had a negative birth outcome if the midwives had not taken those drastic measures.

The expression by the client portrays the misconception that being abused in labour is a favour meant to save the baby's life. The community also is not spared in their acceptance of abuse of women in labour as even some of the CIG members and family members condoned it. These misconceptions were strongly condemned by the participants and the CIG members after presentation of the rights of the childbearing women. The above discussion demonstrates lack of knowledge on the rights of a childbearing woman. There was change in perceptions among the midwives after the training and they affirmed that they had acquired additional knowledge.

- **Non-confidential care**

The midwives strongly agreed that health personnel should not disclose issues dealt with in confidence because the woman would have trusted them.

- **Discrimination**

The midwives commented that sometimes health personnel discriminate women based on religion, status and dressing. For instances, members of the apostolic sect dressed in their

church gowns are sometimes ignored when they are seeking maternal healthcare services, especially when the attending nurse belonged to a different denomination.

Another issue that was raised concerned giving first preferences to teachers from the nearby school ahead of other clients. Sometimes women assume they are being discriminated on, yet the nurses serve the teachers first because they need to go back to work. The midwives agree that it is important to seek permission first from other women before serving the teachers first.

- **Abandonment of care**

Under abandonment of care, the midwives cited a nurse failing to perform routine observations and physical examination on a client who had previously refused probably due to pain, or the client comes in during the nurse' break. The discussions did not indicate instances when women were abandoned during giving of care.

- **Detention in facility**

The midwives noted that, because women are kept at the hospital for monitoring after delivery for three days or more, some complain that they are detained. The midwives agreed that they need to speak to the clients in a civilised manner and explain why the nurses need to be sure that the baby is breast feeding well before the woman is discharged. Midwives should not talk to women as if they are punishing them. In addition, the midwives should explain in a civilised way on what the client is expected to do. They also agreed that such issues can be addressed during the antenatal period so that the client will know what is expected of her.

Challenges experienced by midwives

During the training workshop, the midwives highlighted some challenges that they encounter during practice such as women avoiding group health education sessions that are given at the beginning of each ANC visit leading to lack of knowledge on the recommended schedules and other health promotion activities, closure of ANC and postnatal care clinics over the weekends which may result in working mothers missing the opportunities for early detection of problems and lack of knowledge on alternative birthing positions resulting in women not having a choice in birthing positions.

This is not surprising as literature (Jakeman, 2016:3; Nasir, Korejo & Noorani, 2007:19; USAID and Maternal and Child Survival Programme, 2016:12) revealed that lithotomy

position is the standard position in health facilities and is considered the ideal posture for maternal healthcare providers to deliver the baby due to easy access.

Lack of skills in different birthing positions among midwives could contribute to reluctance by some birthing women to deliver at a health facility in preference to home deliveries where they have a choice. Kea, Tullach, Datiko, Theobald and Kok (2018:7) attested that women in Southern Ethiopia were concerned that if they deliver at a health facility, they would be expected to use the delivery beds lying down and stretching their legs instead of their customary squatting position used during birth at home. Nasir, Korejo and Noorani (2007:21) add that the squatting position keeps the gravid uterus off the major blood vessels and this prevents aortocaval compression which may cause several babies to go into foetal distress because the mother is lying on her back in a supine position. After having noted the advantages of women adopting the squatting position during delivery, USAID and Maternal and Child Survival Programm (2016:12) suggest that women should be encouraged to give birth in the position they are comfortable in.

Roles of maternal healthcare providers

The following roles of a healthcare provider in the provision of respectful maternity care were discussed during the training:

- Information dissemination on patient rights
- Creating awareness campaigns on respectful maternity care
- Ensuring that the client is happy, treating patients equally, attending to their concerns
- Be knowledgeable, keep abreast with current information
- Creating a good rapport with clients, relatives and the community so that they can easily express their concerns
- Reporting abusive behaviour and conduct to responsible authorities

The midwives were given an opportunity to look at the draft posters and birth preparedness information booklet. Midwives from all the clinics that attended the workshop requested to have the check-lists, posters and birth preparedness information booklet for use at their clinics and the request was noted. They all shared interest in participating in the awareness campaign. Although their performance was not evaluated, the awareness campaign spread to most of the clinics in the district based on the request by the District Nursing Officer.

4.4.2.6 Create awareness on disclosing use of herbs during childbirth

The results of the situational analysis showed that women used herbs during pregnancy and labour but were afraid to disclose these practices to healthcare providers for fear of being shouted at. The CIG members agreed to create awareness among women on the importance of disclosing use of herbs to the maternal healthcare provider attending to them to ensure closer monitoring and prompt interventions if any adverse effects occur.

After much deliberation and consultation with the Ministry of Health and Child Health Promotion Department, the CIG members developed two posters to be used during the campaign and a birth preparedness information booklet to be used during health education talks with pregnant women by community workers and maternal healthcare providers (See Annexure H and I respectively). The researcher approached the Ministry of Health and Child Care for funding to print the posters and the birth preparedness information booklet, unfortunately the researcher failed to get any funding. Although no funding materialised because the Ministry of Health and Child Care had already submitted the year's budget to its funding partners, the Ministry of Health and Child Care quality approved the messages to ensure credibility and allowed the CIG members to use the Ministry of Health and Child Care logo on the posters and the birth preparedness information booklet (see Annexure J).

On how the awareness campaign would be carried out, the CIG members agreed that they will disseminate the information using community meetings arranged by community leaders, door to door visits in the community and at the hospital.

With this discussion, the CIG members agreed that the awareness campaign would involve the members and other maternal healthcare providers at the hospital during routine health education talks at the hospital, in the community and at community meetings organised by local leaderships.

4.4.2.7 Engage hospital authorities on initiating and scaling-up home visits

Situation analysis findings showed that women did not return for postnatal care with their babies because they were afraid of crossing road intersections where they believed witches cast evil objects with the intention of hurting people. The results also indicated that women were afraid that their babies would get sick if they come to clinics where they would be exposed to herbs tied on other babies. To address this barrier, CIG members agreed to engage hospital authorities on initiating and scaling-up home visits. In addition, the CIG members agreed on creating awareness on the importance of postnatal care as a way of encouraging the women and community members to critique their fear of witchcraft and

adopt positive health seeking behaviours. Messages on the importance of these visits were included in the birth preparedness information booklet (Figure 4.5 and Annexure I).

4.4.2.8 Engage religious leaders on non-utilisation of maternal healthcare services by church members

The CIG members agreed to engage with religious leaders of church doctrines that prohibit utilisation of maternal healthcare services by church members and non-dispensing of contraceptives at St. Michaels Mission Hospital. To ensure availability of contraceptives to women, the CIG members tasked the researcher to engage Zimbabwe Family Planning Council to train and employ community distributors and train health personnel on insertion of long-term methods of family planning. The CIG members also proposed some members to enquire from the community how the Apostolic Religious leaders could be approached and map a wayforwd with regards to the church doctrine that prohibits its congregants from utilising maternal healthcare services.

Additional outcomes of Cycle 2

During one of the meetings, the CIG members pointed out that the low postnatal returns could be because St. Michaels Hospital did not dispense contraceptives. The CIG members tasked the researcher to approach the Zimbabwe Family Planning Service providers for them to train health personnel on insertion of long-term methods as well as allowing the village health workers to dispense oral contraceptives in their communities. Although the Zimbabwe Family Planning Service provider was willing to train healthcare personnel on insertion of long-term contraceptives, the church authorities would not allow insertion of the devices at the church premises hence that option was not pursued. On the second option of allowing the village health workers to issue oral contraceptives, the Zimbabwe Family Planning Services advised the researcher that the hospital authorities should put the request in writing. At the time of the write-up the CIG members were still waiting for the response from the hospital authorities. Due to the sensitivity of the issue with the church authorities, it could be that no one at the hospital wanted to initiate the correspondence.

The researcher was also tasked to speak to the Roman Catholic Church resident priest regarding the issue of dispensing contraceptives at the hospital. The priest provided some insights on the history of the hospital, the church doctrines and these were shared with the CIG members.

On cultural barriers, especially the one that deters post natal visits during specified days after delivery, the members reasoned that instead of waiting for the individual clients to change their mindset regarding their beliefs, health personnel could conduct home visits to

those women who would not have returned for postnatal care. These suggestions were shared with the hospital authorities and they indicated that, although they may want to conduct home visits, this was not possible due to shortage of health personnel and transport. Despite this drawback, the CIG members continued to create awareness on the importance of institutional attendances.

4.5 Observe and reflect (evaluating)

Evaluation of the participatory action research study was ongoing. However, after the implementation of the initiatives, the CIG members as co-researchers re-assembled to share their experiences and the knowledge gained. From the returns of the check- lists that were administered to monitor the attitudes of maternal healthcare providers as they interacted with women seeking maternal healthcare services, the CIG members critiqued the returned forms and arranged a meeting with the clinical nursing officer for further discussions.

The impact of the awareness campaign evaluation was ongoing, and the CIG members recorded the comments and feedback from the maternal healthcare users, community members and their own in the journal for sharing with other members during the CIG meetings.

The clinical nursing officer and the CIG members agreed that the monitoring of staff should continue and since the study was coming to an end, the clinical nursing officer would be evaluating the health personnel interactions with women thereafter.

4.5.1 Document the group processes

Data was collected using individual journal reflections and CIG member meeting minutes. After the researcher had handed out each member a notebook to be used as a journal and had explained its purpose, the CIG members agreed to document their encounters and experiences in their journals for sharing with other members during the CIG meetings and after each deliberation, the feedback informed the progress of the study.

Mash (2013:4) advises that at the end of the inquiry process, group members should build a consensus of what they have learnt in the participatory process. Each member of the group reflected on the whole inquiry process and shared with others what they had learnt and experienced. New knowledge that was generated includes development of a check-list to monitor healthcare personnel attitude and a birth preparedness information booklet that was adopted by the hospital to be used by midwives and the village health workers during health education talks. Not only will the birth preparedness booklet be used at St. Michaels Mission Hospital, but throughout the district as each clinic in the district had a copy of the

booklet to compliment all health education talks with maternal healthcare service users. The hospital adopted the check-list for continuous monitoring of health personnel attitude even after the completion of the study. Mash (2013:4) suggested three aspects to be documented which were applied by the CIG members as follows;

i) **The individual experience and action** - each CIG member kept a journal where they were record their experiences, interactions made with community members and their thoughts, feelings, and suggestions for sharing with other members during the feedback meetings.

ii) **The group processes and dynamics** - an audio recorder was used to record all the meeting proceedings. The researcher transcribed the minutes verbatim and presented them as a summarised version to the group for verification and approval. The generated data from the check-list was recorded and kept safely by the CIG member 7 who was tasked to do so before they were analysed by the group and handed over to the researcher for safe keeping. The hospital clinical nursing officer requested the copies of the filled in check- lists for discussion with the rest of the maternal healthcare providers working at the hospital. The CIG members deliberated on the request and agreed to allow the researcher to give the hospital clinical officer the copies. Members respected each other's contributions and no conflicts arose throughout the group's meetings.

iii) **The developing of reflections, learning and final consensus** - there were in-depth minutes of the CIG meetings that were transcribed from the audio recorders describing the discussions that ensued before consensus was reached on which initiatives to adopt and on how they were implemented, analysed and documented. All the activities of the researcher and the CIG members are reflected in the following chapter.

4.5.2 Changes in practice

The CIG members took control of the project. Through collective determination and effort CIG members managed to produce a birth preparedness information booklet, create awareness on maternal health issues affecting the community and suggested ways on how to address them, thereby bringing attention to issues that were salient to them and the community. The CIG members were also able to create social changes as there was training of healthcare personnel on respectful maternity care and universal rights for the childbearing women and adoption of the check-list and birth preparedness information booklet by the hospital. The posters and the birth preparedness information booklet were endorsed by the Ministry of Health and Child Care, hence giving them credibility (Annexure

J). Following further consultation with the responsible authority, the following changes were implemented: provision of basic care to male partners who accompanied their wives to hospital, cascading of the birth preparedness information booklet to all health facilities in the district and ongoing monitoring of health personnel attitudes.

The major purpose of critical theory is making problematic what is taken for granted in culture (Nichols & Allen-Brown, 2002:1), hence social justice was established by critiquing and confronting the norm and accepted tendency of abusing labouring women in the guise of preventing infant death. Geuss (1981:58) asserts that the effect of a successful critical theory is to emancipate and empower, which in the researcher's opinion, by critiquing practices, norms and values, the CIG members and health personnel at St. Michaels Mission Hospital were enlightened and empowered as they participated in the research process and in the implementation of the developed initiatives. The process also empowered the CIG members and the researcher as they validated the knowledge they created by involving other stakeholders. Most of the changes that were brought about by the developed initiatives are described in detail in chapter 5.

4.5.3 Challenges

Although there were some logistic problems during health personnel training and lack of funding for printing of more posters and birth preparedness information booklets, the researcher and the CIG members managed to develop and implement the initiatives for enhancing utilisation of maternal healthcare services at St. Michaels Mission Hospital. The main challenges were related to lack of funding and community leaders' involvement.

4.6 Comparison with findings from other research

The negative health personnel attitude experienced in this study were also confirmed in studies done in Ghana (Ganley et al, 2014:13), where nurse-patient relationships seem to be structured around control and power over women resulting in shunning of maternal healthcare services. The study also highlighted lack of confidentiality and privacy at the hospital, resulting in most people not accessing HIV counselling and testing services and instead opting for other facilities outside the district. These sentiments are in congruent with those expressed with other participants in different settings where women were not disclosing their status during health assessment as they were asked while everyone else was listening. These practices affect the quality of care rendered as incorrect information is given, affecting the interventions that are given.

In Ethiopia, Burrows, Holcombe, Dube, Carter and Smith (2017:1) reported that women were physically and verbally abused, detained at a health facility and discriminated upon because of different ethnic groups from that of healthcare providers. These behaviours

show weaknesses of health systems. Consistent with developed check-list in this study to address negative health personnel attitudes, adoption of WHO Safe Childbirth Checklist at a hospital in Bangladesh improved communication between maternal healthcare providers and mothers (Nababan, Islam, Mostari, Tariqujjaman, Sarker, Islam & Moucheraud, 2017:4).

The findings from this study on use of herbs in pregnancy and childbirth are comparable to studies done in Ethiopia (Mekuria, Erku, Gebresillassie, Tizazu & Ahmedin, 2017), Malaysia (Teoh, Aizul, Suriyani, Huda, Azlinl & Rohana, 2013) and Saudi Arabia (Al-Ghamdi, Aldossari, Al-Zahrani, Al-Shaalan, Al-Sharif, Al-Khurayji & Al-Swayeh, 2017). In all these studies, the authors recommended integration of traditional medicine with modern medicine. In Ethiopia (d'Avigdor, Wohlmuth, Asifaw & Awas, 2014:5) programs were initiated to support the establishment of medicinal herbal gardens.

Consistent with these findings, poor male involvement in maternal health issues was also reported in studies done in Uganda (Nakku, Okello, Kizza, Honikman, Ssebunnya, Ndyanabangi, Hanlon & Kigozi, 2016:6) and in Malawi (Zamawe, Banda & Dube (2015:2). Health facilities, work places and community-based initiatives were put in place to encourage men engagement and involvement in maternal healthcare issues. These initiatives were productive as evidenced by reports from women, that those who were escorted by their husbands received effective and efficient quality care compared to their counterparts who came alone (Machira & Palamuleni, 2018:33). In Tanzania, there was an improvement in male involvement in maternal health issues following a Home-Based Life Saving Skills training program on male involvement and place of delivery (August, Pembe, Mpembeni, Axemo & Darji, 2015:8).

In a study conducted in Zimbabwe to explore the health and well being of the Apostolic sect children and women, Mpofu, Dune, Hallfors, Mapfumo, Mutepfa and January (2014:559) revealed that, although the churches offer social support to its congregants, women and children are exposed to health risks due to the church doctrines that do not allow them to seek healthcare services at a health facility. These findings are congruent to those in this study, where women seeking maternal healthcare services were prohibited by church leaders from utilising maternal healthcare services, instead they were assisted by elderly church women at their shrines.

4.7 Conclusion

This chapter reported on the findings of Cycle 2, namely the development and implementation of initiatives to enhance utilisation of maternal healthcare services. The next

chapter will address the findings of Cycle 3 which describe the differences after implementation of the initiatives.

CHAPTER 5

FINDINGS OF CYCLE 3 AND LITERATURE CONTROL

5.1 Introduction

This three-cycle PAR study was undertaken with the purpose of developing initiatives for enhancing utilisation of maternal healthcare services in Mhondoro Ngezi district. In Cycle 1, the situational analysis cycle, findings on maternal healthcare services utilisation revealed late initial booking, low repeat contact visits, high institutional deliveries and poor postnatal repeat visits in the district. Uptake of services offered during antenatal, intrapartum and postnatal periods were generally high especially HIV testing. Maternal mortality was low when compared to the national rate during the same period. In the same cycle, barriers and enablers to utilisation of maternal healthcare services emerged from three focus group discussions with maternal healthcare providers, community members and postnatal women.

Findings from the focus group discussions on utilisation of maternal healthcare services revealed barriers and enablers to utilisation of maternal healthcare services and cultural and religious beliefs and practices women were expected to conform to to ensure they deliver a healthy baby. Barriers to utilisation of maternal healthcare services were identified as negative health personnel attitudes, perceived user fees and incidental costs, distance and transport problems, presence of male nurses, fear of witch-craft, disregard for indigenous practices and beliefs, herbal use and spiritual beliefs. Furthermore, there was a shortage of essential drugs, ambulance service, blood bank, scanning facilities and the operating theatre was not functioning. The cycle findings revealed issuing of birth records and incentives, provision of transport and presence of Apostolic Association as enablers to utilisation of maternal healthcare services. New knowledge on indigenous birthing practices, norms and values was generated.

In Cycle 2, the objective was to develop and implement initiatives for enhancing utilisation of maternal healthcare services. The results of Cycle 1 were presented to the community members, community-based health workers and health personnel. After these presentations, 9 CIG members comprising of maternal healthcare providers, community members and postnatal women were purposively selected and worked collaboratively with the researcher in cycles of critiquing the situational analysis results, planning, developing, implementing and evaluating initiatives for enhancing utilisation of maternal healthcare services. The highlights of the cycle were the development and implementation of the following initiatives which are described in detail in Chapter 4:

- Developed posters and created awareness on male partner involvement and free maternity care,
- Created awareness on importance of disclosing use of herbs during childbirth to the attending midwife,
- Developed birth preparedness information booklet to sensitise women on importance and rationales of scheduled visits, services offered and complications to watch for during pregnancy,
- Developed a check-list to improve quality of care offered to women and to monitor health personnel attitude, and
- Facilitated training of midwives on respectful maternity care and the rights of the childbearing woman.

The following were initiated and were still pending:

- Engaged hospital authorities to initiate and scale-up home visits to address cultural beliefs that inhibit facility-based care during postnatal period.
- Opened dialogue with religious leaders on non-issuing of contraceptives at mission hospital.
- Initiated engagement of Zimbabwe Family Planning Service providers on training and engaging community based contraceptive distributors. The CIG members requested the hospital authorities to pursue the issue.

In this chapter, the findings of Cycle 3 will be presented and discussed. The objectives for Cycle 3 were to:

1. compare maternal morbidity and mortality rates and maternal healthcare services utilisation with baseline data after implementation of initiatives to enhance utilisation of maternal healthcare services;
2. compare maternal healthcare services utilisation with baseline data after implementation of initiatives to enhance utilisation of maternal healthcare services;
3. describe the CIG members' reflection on the PAR cycles to enhance utilisation of maternal healthcare services.

The same ethical approvals that were sought from the Zimbabwe Medical Research Council, the Ministry of Health and Child Care, Harare Central Hospital ethical committee (Annexure D) and the community leaders to undertake the study in Mhondoro-Ngezi district in Cycle 1 were used in Cycle 3. Extension of data collection period was sought from the Ethics Committee of the Faculty of Health Sciences, University of Pretoria after the

approval used in Cycle 1 and 2 had expired and approval was granted (see Annexure D). As in Cycle 1, both quantitative and qualitative data for Cycle 3 were collected and analysed sequentially. Collection of data for Cycle 3 overlapped with the implementation of initiatives in Cycle 2.

The results of Cycle 3 will be presented in three parts. In Section A, quantitative data on maternal morbidity and mortality and maternal healthcare services utilisation after implementation of the developed initiatives will be presented and discussed. In the same section statistical findings from statistical methods for association between groups will also be presented. In Section B findings on maternal healthcare services utilisation after implementation of the developed initiatives from three focus group discussions with purposively selected maternal healthcare providers, community members and postnatal women who were different from the ones used in Cycle 1 will be presented and discussed. In Section C the CIG members' reflections will conclude the presentation of findings.

5.2 Results: Section A: Comparison of maternal morbidity and mortality and maternal healthcare services utilisation statistics

This section will discuss comparison of maternal morbidity and mortality and maternal healthcare services utilisation statistics.

5.2.1 Comparison of antenatal care utilisation statistics

Under antenatal care, comparisons of attendances during initial ANC contact visit and utilisation of maternal healthcare services offered in the district and at St. Michaels Mission Hospital between June-July 2015 and June-July 2017 will be presented. This will be followed by comparisons of repeat ANC contact visits in the district and at St. Michaels Mission Hospital between June-July 2015 and June-July 2017.

5.2.1.1 Initial antenatal care attendance

Generally, there was an increase in the number of women who attended the first ANC visit at less than 16 weeks during the period June 2017 to July 2017 when compared to the same period in 2015 in the district as illustrated in Figure 5.1.

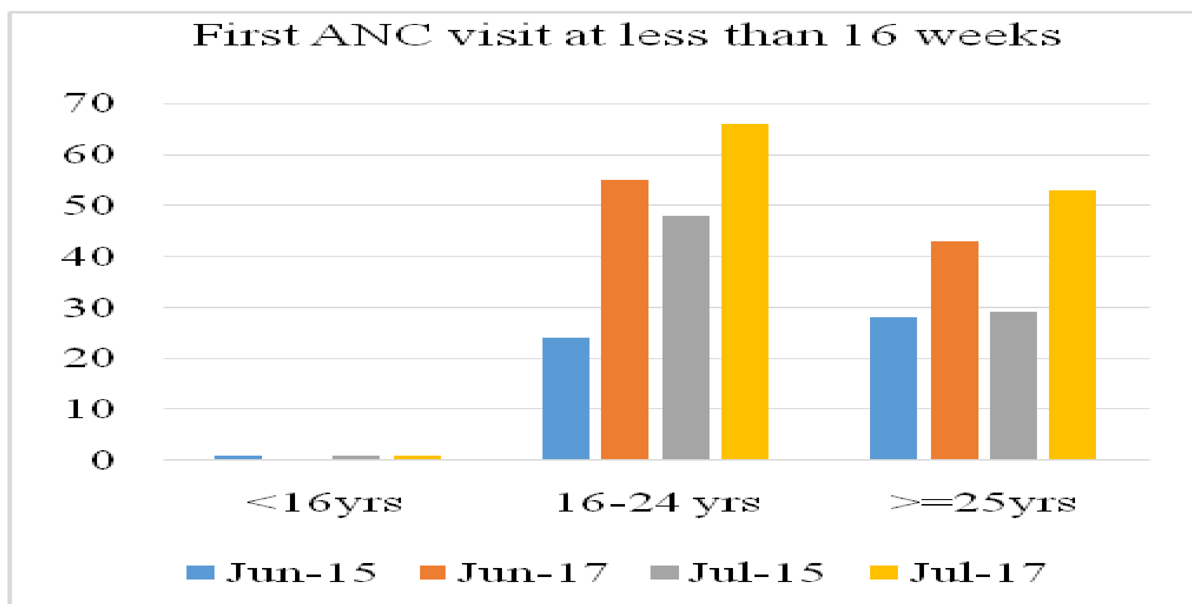


Figure 5.1: First antenatal visit within 16 weeks for Mhondoro-Ngezi district for June-July 2015 and June-July 2017

On average, 44 women attended the first visit at less than 16 weeks (sd = 36.9) between June 2015 and July 2015 compared to an average number of 73 women during the same period in 2017 (sd =63.3). There was a marginal increase in the number of women who attended their initial ANC visit within 16 to 27 weeks in the district (see Figure 5.2).

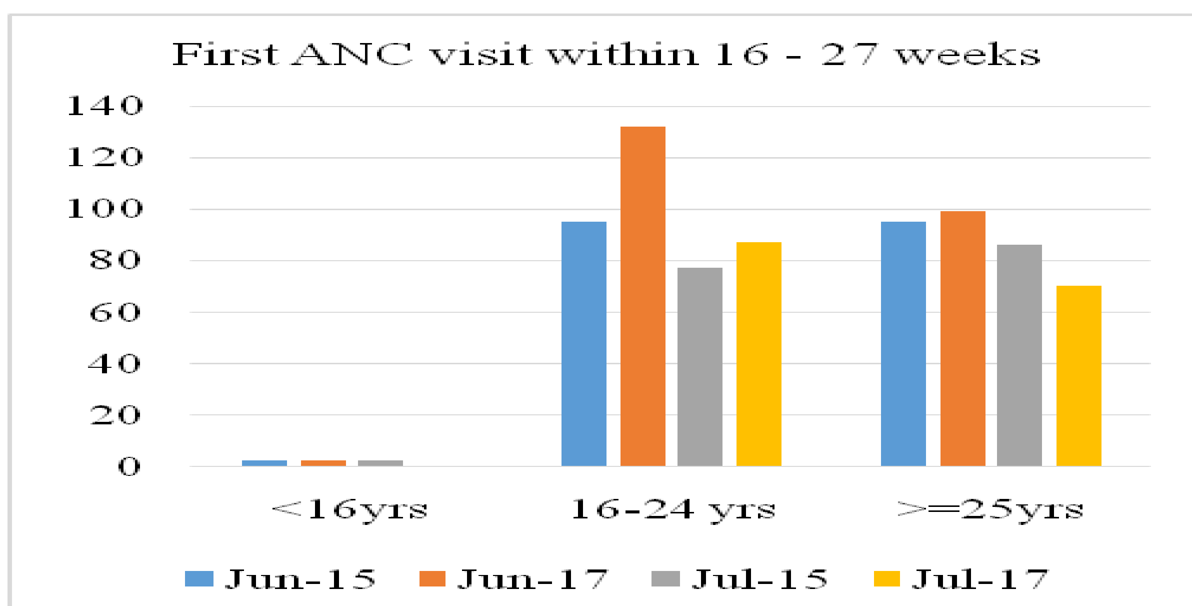


Figure 5.2: First antenatal visit within 26-27 weeks for Mhondoro-Ngezi district for June-July 2015 and June-July 2017

On average, 119 women attended their first ANC visit between June 2015 and July 2015 across the three age groups compared to 130 women during the same period in 2017. There was sufficient evidence (p=0.029) to show an increase in the proportion of women aged 16-24 years who attended their first ANC visit from 16-27 weeks in 2017 compared to 2015. A significant decrease in women aged 25 years or older who attended their first ANC visit between 16 and 27 weeks was noted in 2017 from June to July compared to the same period in 2015 (p=0.04).

There was a decrease in the number of women who attended their first ANC at 28 weeks or later in 2017 across all age groups in Mhondoro-Ngezi District (see Figure 5.3).

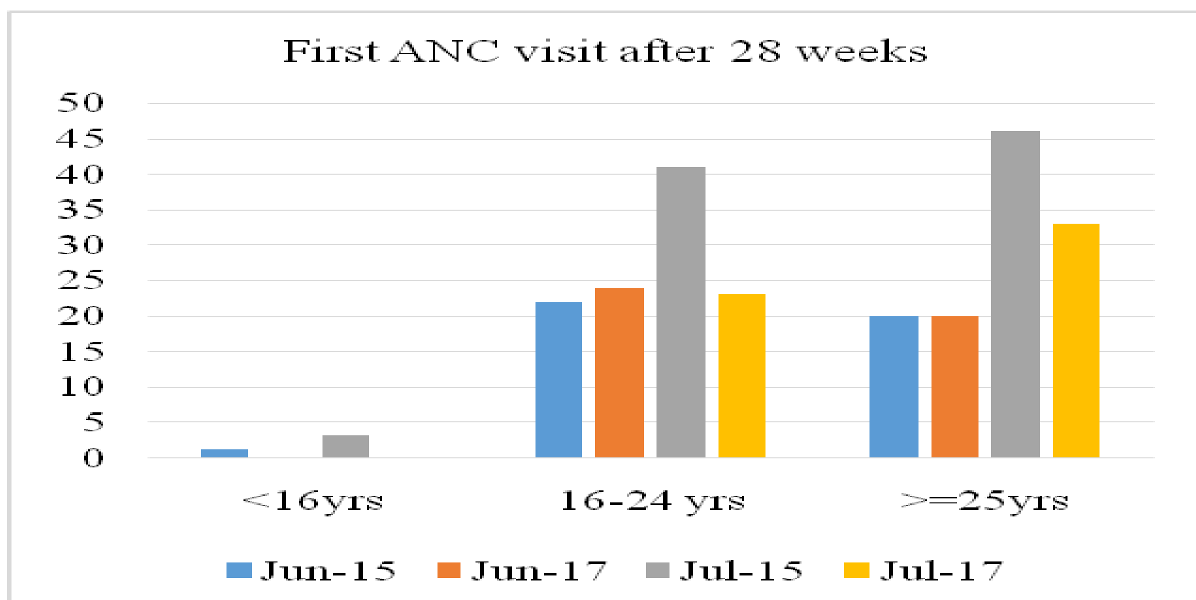


Figure 5.3: First antenatal visit within after 28 weeks for Mhondoro-Ngezi district for June-July 2015 and June-July 2017

About 133 women attended their first ANC visit at 28 weeks or later between June 2015 and July 2015 (mean =44, sd = 35) and 100 women attended ANC at 28 weeks or later during the same period in 2017 (mean = 33, sd = 29). There was no sufficient evidence to show a difference in proportion of women who attended their first ANC visit at or after 28 weeks in 2017 and 2015 June to July (p=0.93).

The mentioned figures translate to 69.2% women booked late in 2017 compared to 78.9% in 2015. These results may be an indication that the awareness campaign and health education talk by CIG members and health personnel on the importance of booking for

ANC before 14 weeks of pregnancy had an impact hence reduced number of women booked late. Furthermore, messages on free maternity care could have acted as a pull factor among women who perceived user fees as an impediment.

Although there was a reduction in the number of women who booked late in 2017, the results show that most pregnant women in Mhondoro Ngezi district book for ANC late. The same trends of high ANC coverage and initiation of ANC after the recommended 14 weeks gestation has been a perennial problem nationally. There might be a need for domiciliary visits to ensure pregnant women at risk are screened early and health promotion interventions are initiated timely. Late ANC booking was also reported in a study conducted in Central Zone, Tigray, Ethiopia by Gidey, Hailu, Nigus, Hailu, G/her & Gerensia (2017:2) where 59% of the women booked after the 4th month of pregnancy. On the contrary, in Nepal most (70%) of the women had started their first ANC at 4 months or earlier (Paudel, Kha & Mehata, 2017:3).

5.2.2 Comparison on maternal services utilised during pregnancy

Rapid plasma reagent testing, HIV counselling and testing and provision of intermittent preventive treatment for malaria were services offered during ANC in both 2015 and 2017 and a comparative presentation and discussion is next.

5.2.2.1 Rapid plasma reagent testing during ANC visit

A total of 681 rapid plasma reagent tests were conducted in June to July 2017 compared to 584 tests in June to July 2015 in the district as illustrated in Figure 5.4.

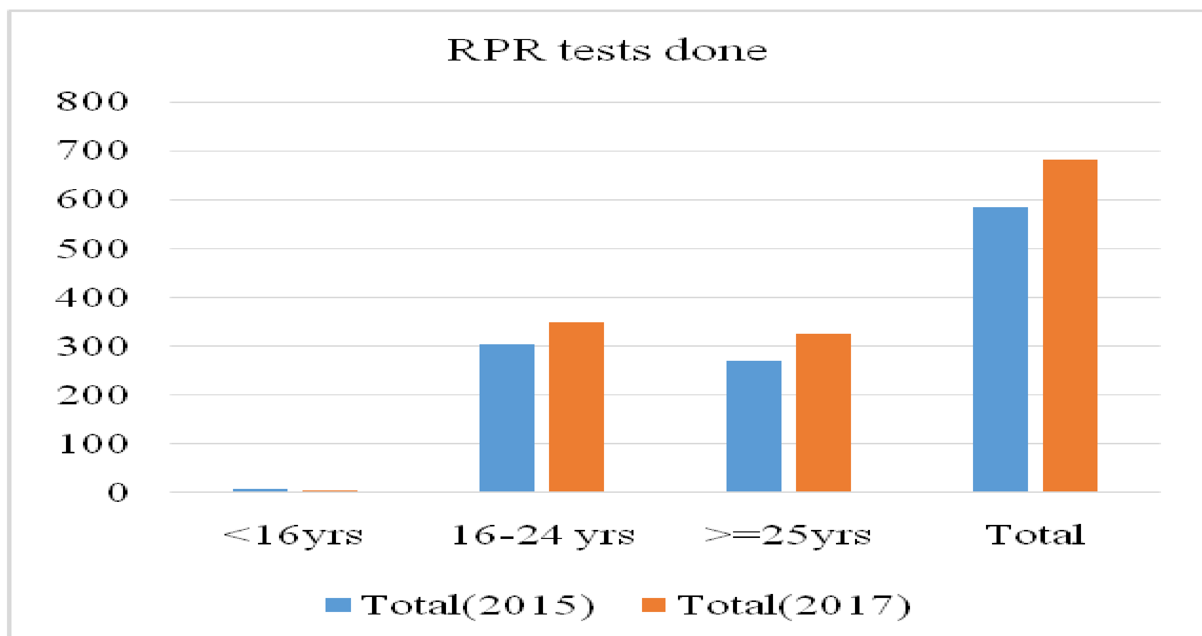


Figure 5.4: Rapid Plasma Reagent Tests done for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

When the RPR tests that were done in June to July 2017 were compared with the number of women who booked their pregnancy during the same period in 2015, the results indicate that the majority 96.2% and 94% of women had the test done respectively. On average, 227 RPR tests were done from June 2017 to July 2017 compared to an average of 195 in 2015 during the same period. There was no sufficient evidence to show a difference in the proportion of RPR done in 2017 June to July compared to those done in 2015 during the same period (p=0.07).

The high syphilis screening rate in this study has been consistent and these findings are indicative of the success of the screening procedures in the district. High (85%) syphilis screening has also been reported in Haiti (Mirkovic, Lathrop, Hulland, Jean-Louis, Lauture, D'Alexis, Hanzel & Grand-Pierre, 2017:4). Low syphilis prevalence rates were recorded in Burkina Faso because health personnel did not systematically prescribe syphilis screening, health personnel perceptions that most women who undertake the test are negative, lack of testing equipment and fragmented health services (Bocoum, Kouanda & Zarowsky, 2014:3).

There was a marginal decline in the number of RPR tests which tested positive in 2017 compared to 2015 across all age groups except for women aged 25 years and above. Figure 5.5 illustrates the RPR positive results in the district from June to July 2015 and June to July 2017.

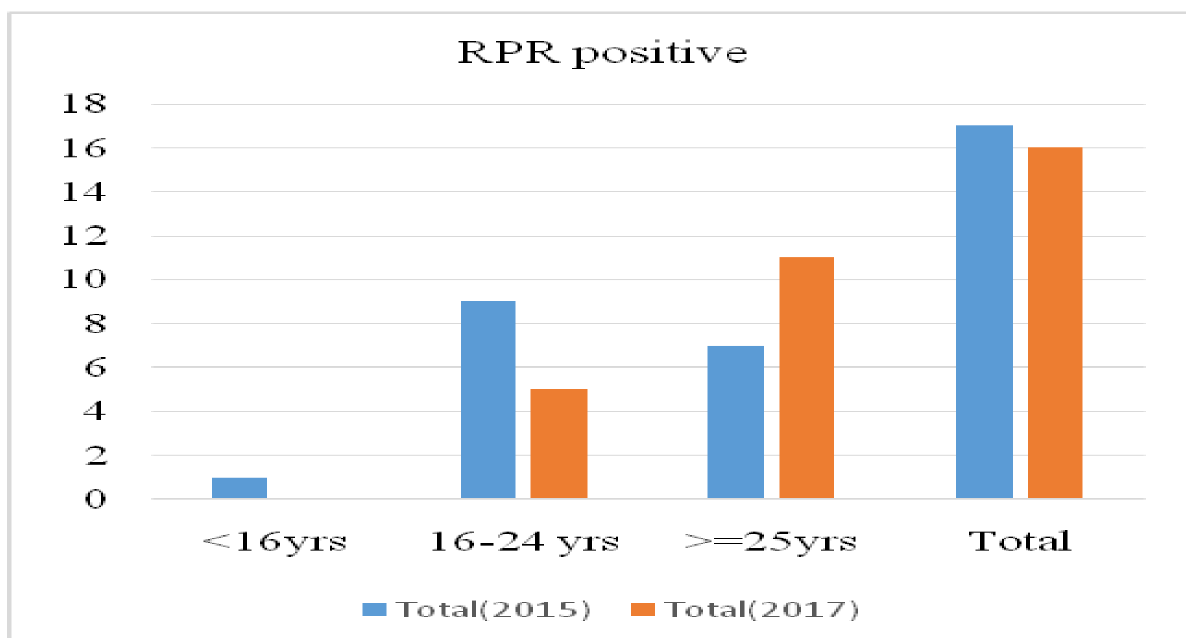


Figure 5.5: Rapid Plasma Reagent positive results done for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

Out of a total of RPR tests done in the district in June to July 2017 only 16 (2.6%) tested positive compared to 17 (2.9%) who tested positive during the same period in 2015. On average, 5 RPR positive tests were recorded from June 2017 to July 2017 while an average of 6 RPR positive tests were recorded during the same period in 2015. However, there was no sufficient evidence to show the decline in RPR tests which tested positive in 2017 compared to 2015 (p=0.53). These results are consistent with findings in Cycle 1 where the majority (98.7%) of women tested for syphilis in the district were negative. The consistence could be due to intensive health education talks that are in place country wide on safer sex practices.

5.2.2.2 Human Immune Virus testing during antenatal visit

A general increase in the number of women who had a HIV test done was recorded in the district across all age groups except for the women below 16 years of age. A total of 770 HIV tests were done from June to July 2017 compared to an average of 604 tests in 2015 during the same period. Figure 5.6 illustrates HIV tests done in Mhondoro-Ngezi District in June to July 2015 and June to July 2017.

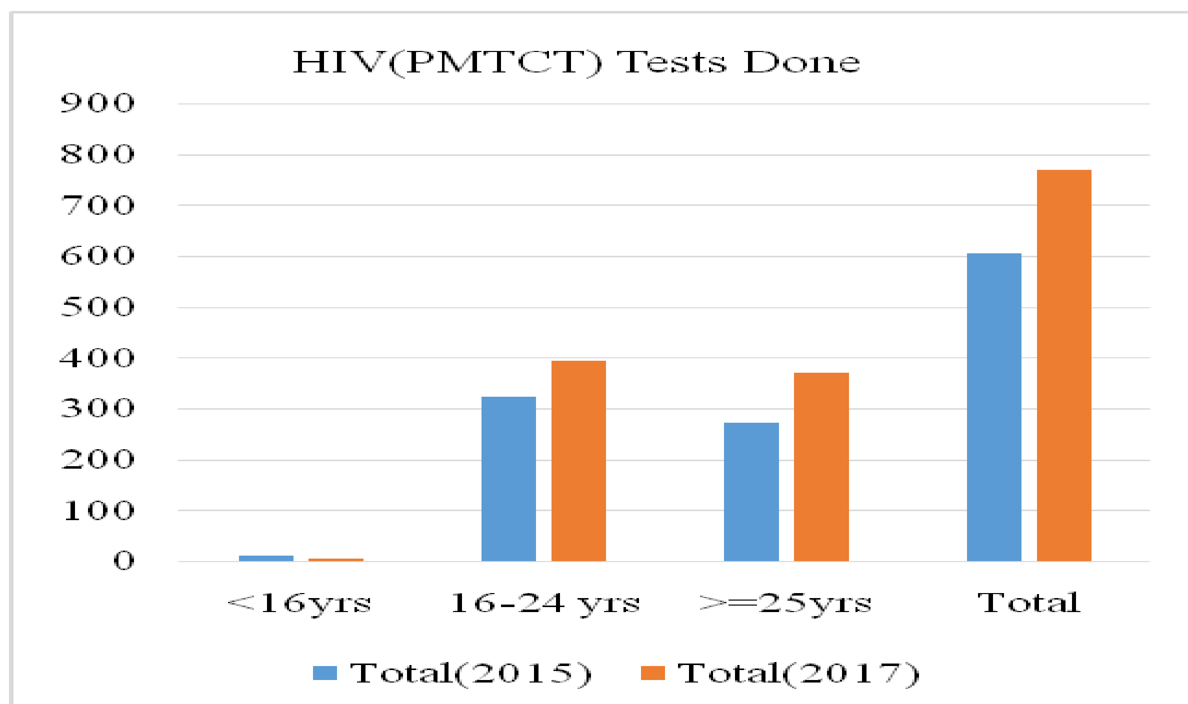


Figure 5.6: Human Immune Virus tests done for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was sufficient evidence to show an increase in HIV tests done in 2017 compared to 2015 ($p<0.001$).

The same trends noted in Cycle 1, where the number of women who were tested for HIV during ANC visit exceeds the number of women who booked for ANC in the district, was also recorded in this cycle. The same explanation given in Cycle 1, that women from one district could have opted to be tested in another district due to issues of confidentiality that were mentioned in the study. There is need for on job counselling training of all health personnel to ensure issues of confidentiality are addressed and to retain confidence in the service delivery.

The high HIV testing in pregnancy reported in this study is consistent with findings from a study conducted in Haiti (Mirkovic, Lathrop, Hulland, Jean-Louis, Lauture, D'Alexis, Hanzel & Grand-Pierre, 2017:4) where among pregnant women who attended at least one visit prior to their current visit, 96% reported having been tested for HIV and among those tested, results were returned to more than 90% women.

Out of a total of 770 pregnant women who were tested for HIV in the district in 2017, 50 (6.5%) tested positive and out of 604 pregnant women who were tested for HIV during the same period in 2015, 40 (6.6%) tested positive. A marginal HIV positive test decrease was observed in 2017 although there was no HIV positive test recorded for women below 16 years of age. Figure 5.7 illustrates HIV positive tests done in Mhondoro-Ngezi District in June to July 2015 and June to July 2017.

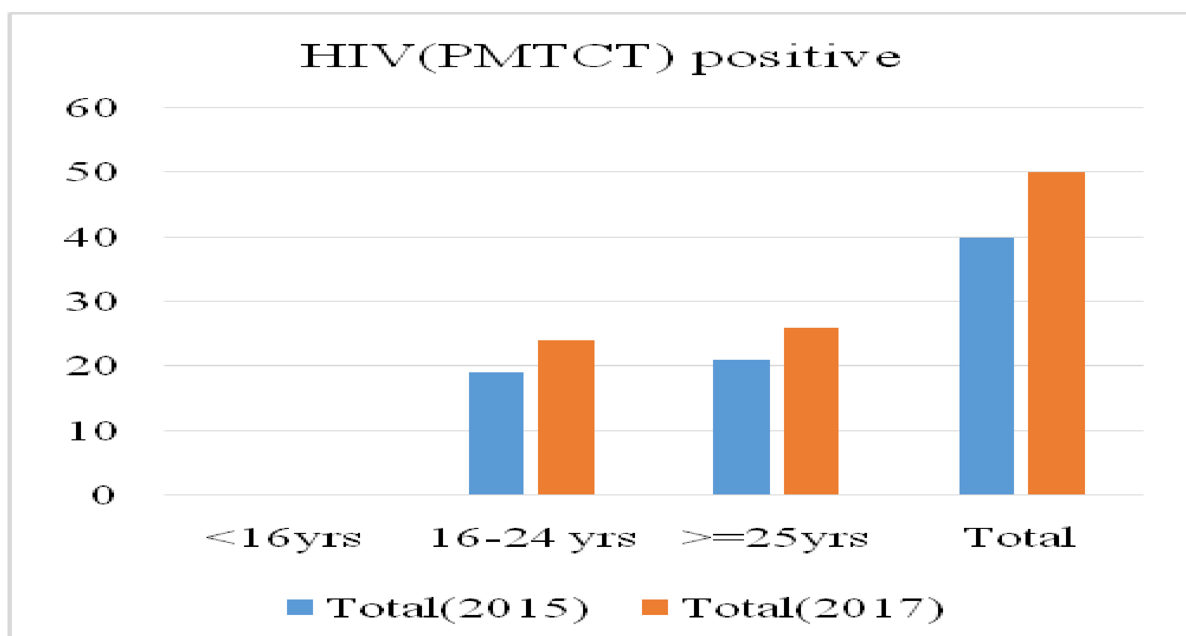


Figure 5.7: Human Immune Virus positive tests done for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was however, no sufficient evidence (p=0.75) to show a difference in HIV positive tests in 2017 compared to 2015. An average of 17 positive tests (sd = 14.5) were recorded from June 2017 to July 2017 compared to an average of 13 positive tests (sd = 11.6) in 2015 during the same period.

There has been a low HIV prevalence and a decline trend, and this could be attributed to the success of PMTCT programs in the district. Contrary to these findings, high (30%) HIV positive prevalence in pregnant mothers was reported in a study conducted in South Africa (Dinh, Dalaney, Goga, Jackson, Lombard, Woldesenbet, Mogashoa, Pillay & Shaffer, 2015:7). Contrary, low (5.3%) HIV prevalence among currently pregnant women was reported in a survey data from Kenya, Tanzania, South Africa and Swaziland (Eaton, Rehle, Jooste, Nkambule, Kim, Mahy & Hallett, 2014: S510).

5.2.2.3 Intermittent preventive treatment for malaria during pregnancy

A total of 1461 women received intermittent preventive treatment of which 556 (38.1%) received first intermittent preventive treatment, 543 (37.2%) received second intermittent preventive treatment and 362 (24.8%) received third intermittent preventive treatment in 2017 while a total of 718 women received intermittent preventive treatment in June to July 2017 and of these, 346 (48.2%) received first intermittent preventive treatment, 250 (43.8%) received second intermittent preventive treatment and 122 (17%) received third intermittent preventive treatment during the same period in 2015. Figures 5.8, 5.9 and 5.10 illustrate

intermittent preventive treatment for malaria 1, 2, and 3 respectively that was issued in the district in June to July 2015 and June to July 2017.

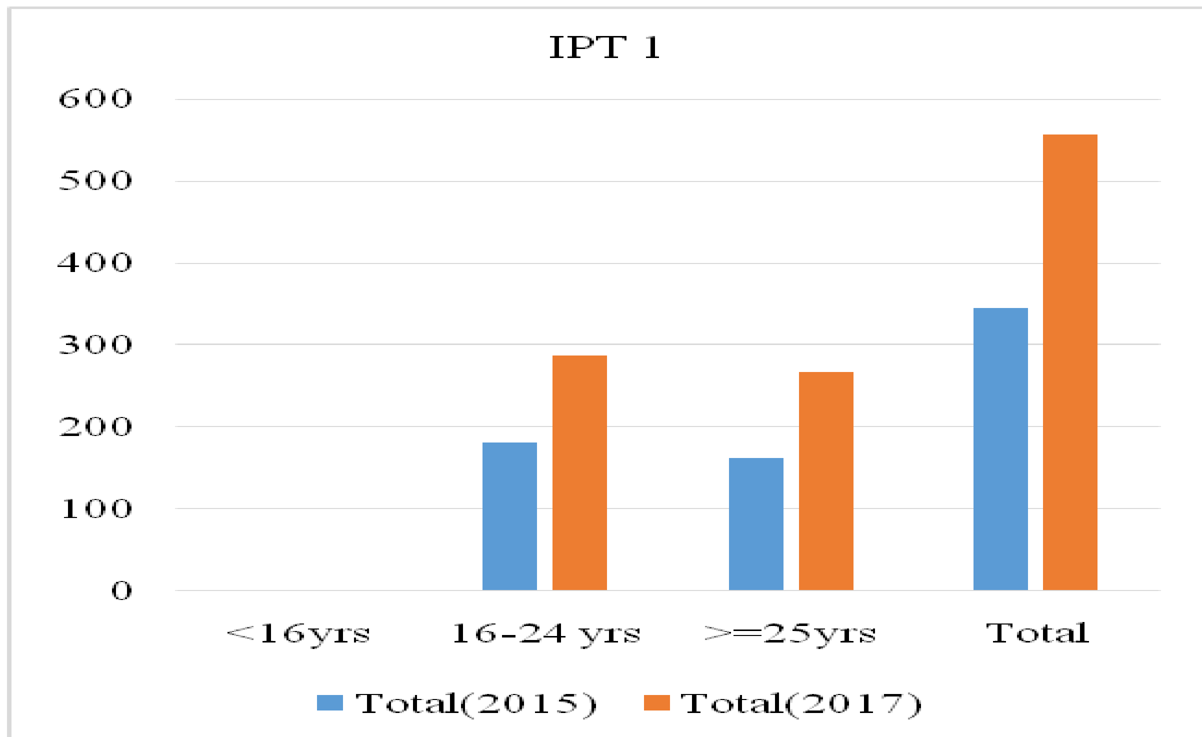


Figure 5.8: First Intermittent Preventive Treatment for malaria for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

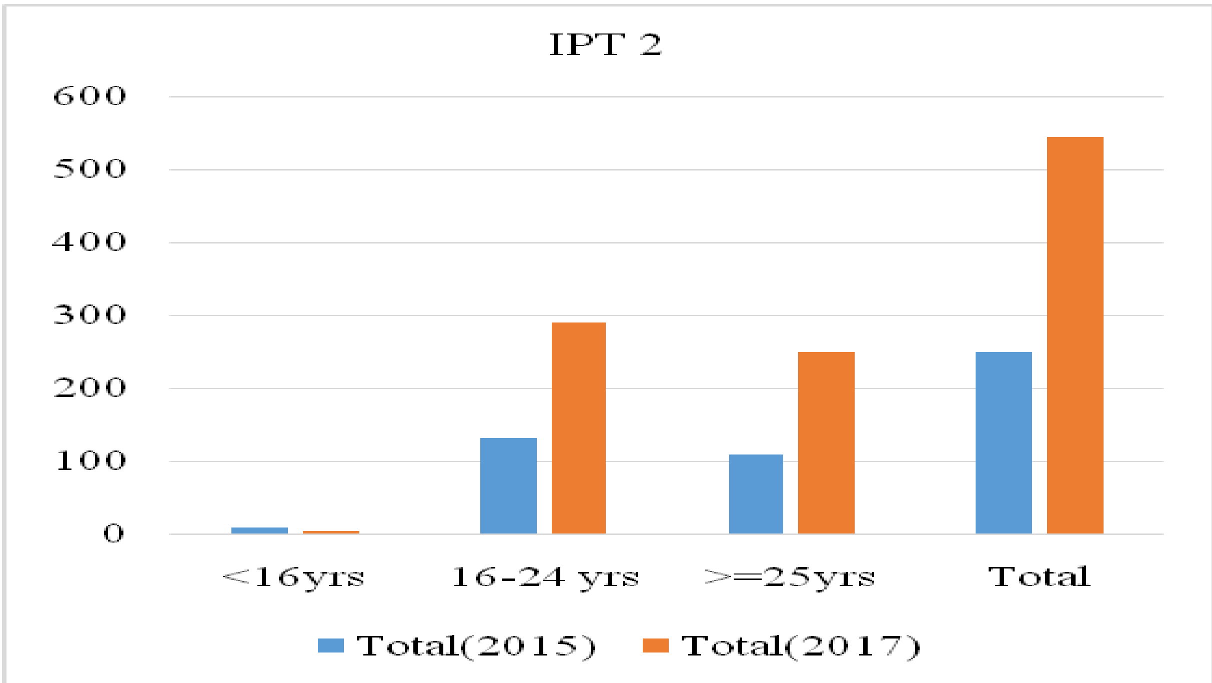


Figure 5.9: Second Intermittent Preventive Treatment for malaria for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

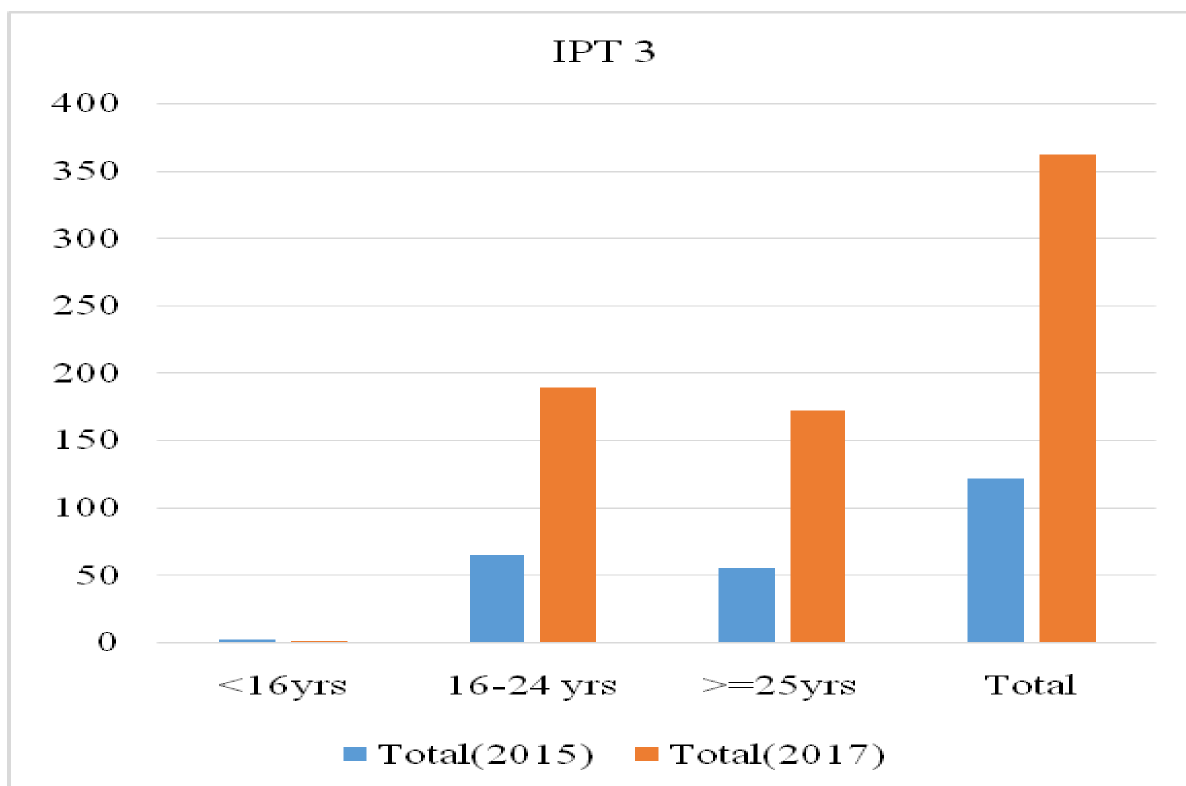


Figure 5.10: Third Intermittent Preventive Treatment for malaria for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was therefore a general increase in women who had a second intermittent preventive treatment for malaria across all age groups in June to July 2017 except for the women in the less than 16 years age group where the number dropped to 4 from 9. There was sufficient evidence to show an increase in the proportion who had first intermittent preventive treatment ($p<0.001$), second intermittent preventive treatment ($p<0.001$) and third intermittent preventive treatment 3 ($p<0.001$) in 2017 from June to July to compared to 2015 during the same period respectively. There was generally an increase in issuing of intermittent preventive treatment among pregnant women in 2017 compared to same period in 2015 and the small figures may indicate that malaria prevalence in Mhondoro-Ngezi district is still low.

The increase in the number of women issued with intermittent preventive treatment in 2017 may be indicative of more women initiating ANC early in June to July 2017 compared in the same period in 2015 owing to the awareness campaign that was initiated by the CIG members on the importance of booking for ANC early.

When results were further analysed per age groups, there was a general increase in women who had a second intermittent preventive treatment for malaria across all age

groups in 2017 except for the women in the less than 16 years age group, where the number dropped to 4 from 9 during the same period in 2015. The number of women who had a third intermittent preventive treatment for malaria increased in 2017 compared to 2015 across all age groups although only 1 woman aged below 16 years had third intermittent preventive treatment in 2017 while 2 were recorded in 2015. On average, 121 women had a third intermittent preventive treatment from June 2017 to July 2017 compared to an average of 41 women in 2015 during the same period. Most women received intermittent preventive treatment after the first trimester. This is consistent with the WHO guideline on the issuing of intermittent preventive treatment which recommends issuing of first intermittent preventive treatment dose at each scheduled visit after quickening.

The study results are consistent to those obtained by Anchang-Kimbi, Achidi, Apinjor, Mugri, Chi, Tata, Nkegoum at al (2014:4) in a survey in Mount Cameroon Area where most women received intermittent preventive treatment between the seventh and eighth month of gestation. This is because most women booked late. Contrary to these findings, malaria assessment in pregnancy was very poor in a study conducted in rural Western Kenya, where only 5% pregnant women were assessed and 57% were asked about their trimester before being given malaria prophylaxis (Riley, Dellicour, Ouma, Kioko, Kuile, Omar, Kariuki, Buff, Desai & Gutman, 2016:10).

Comparative findings of second, third and fourth and more repeat contact visits for June to July 2015 and June to July 2017 will be presented next.

5.2.3 Antenatal care contact repeat visits attendance

Generally, the district recorded an increase in the number of women across all age groups who attended a second repeat ANC contact visit in June to July 2017 compared to the same period in the year 2015, except for the women less than 16 years of age. On average, 159 women (sd = 133.9) attended a second ANC visit during the period June 2015 to July 2015 compared to an average of 204 (sd= 178) during the same period in 2017. Figure 5.11 illustrates second ANC visits for Mhondoro-Ngezi district June to July 2015 and June to July 2017.

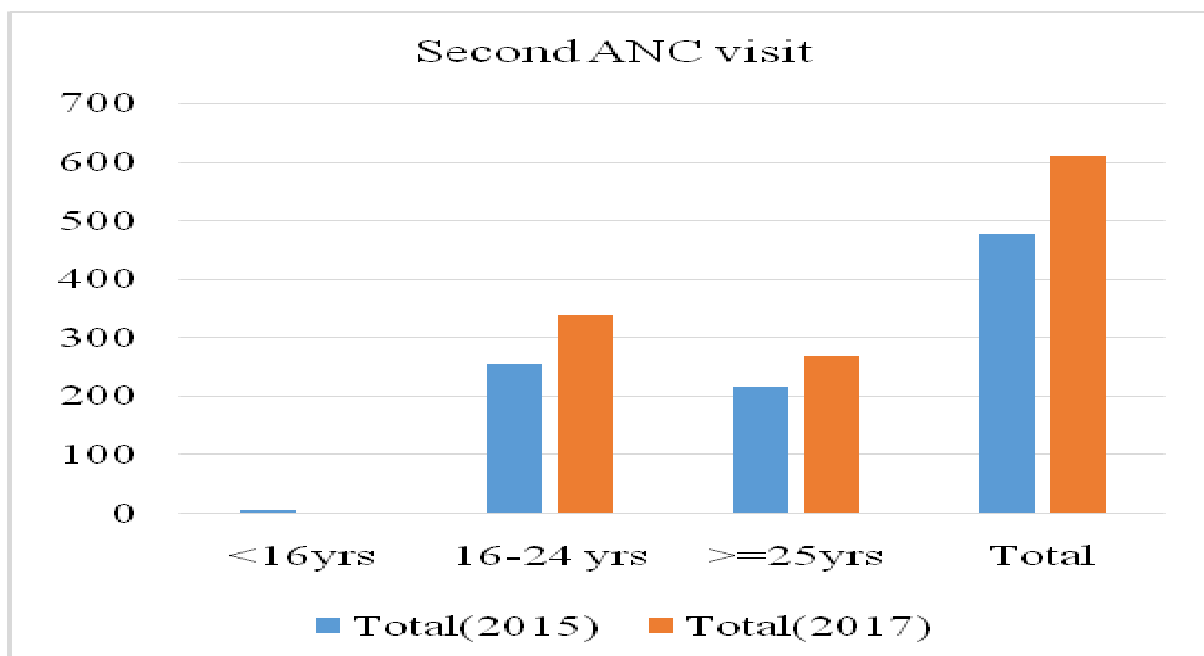


Figure 5.11: Second ANC visit for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was sufficient evidence ($p<0.001$) to show an increase in women who attended their second ANC visit in 2017 between June and July compared to the same period in 2015.

There was an increase in women who attended a third ANC visit in 2017 except for women aged less than 16 years old. On average, 144 women (sd = 119.9) women attended a third ANC in June 2015 to July 2015 compared to 162 women (sd = 140) during the same period in 2017. Figure 5.12 illustrates third ANC visit for Mhondoro-Ngezi district June to July 2015 and June to July 2017.

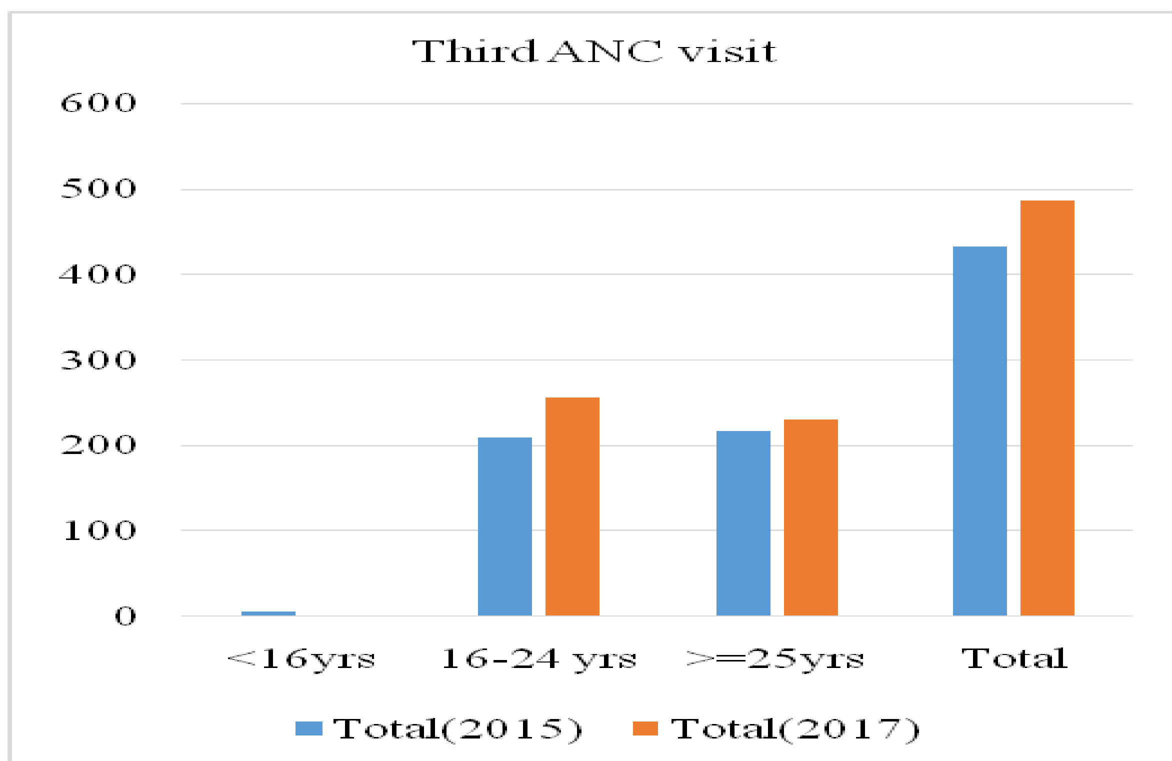


Figure 5.12: Third ANC visit for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was no sufficient evidence to show a difference in women who had four or more ANC visits in 2017 compared to 2015 ($p<0.07$). An average of 276 women (sd = 231) had four or more ANC visit during the period June 2017 to July 2017 while an average of 224 women (sd = 194.2) had four or more ANC visits during the same period in 2015. These results are indicative that more strategies need to be put in pace to motivate pregnant women to attend repeat antenatal care visits, bearing in mind that antenatal care represents an opportunity for dissemination of key health information and early detection of complications. Figure 5.13 illustrates fourth or more repeat visits for Mhondoro-Ngezi district June to July 2015 and June to July 2017.

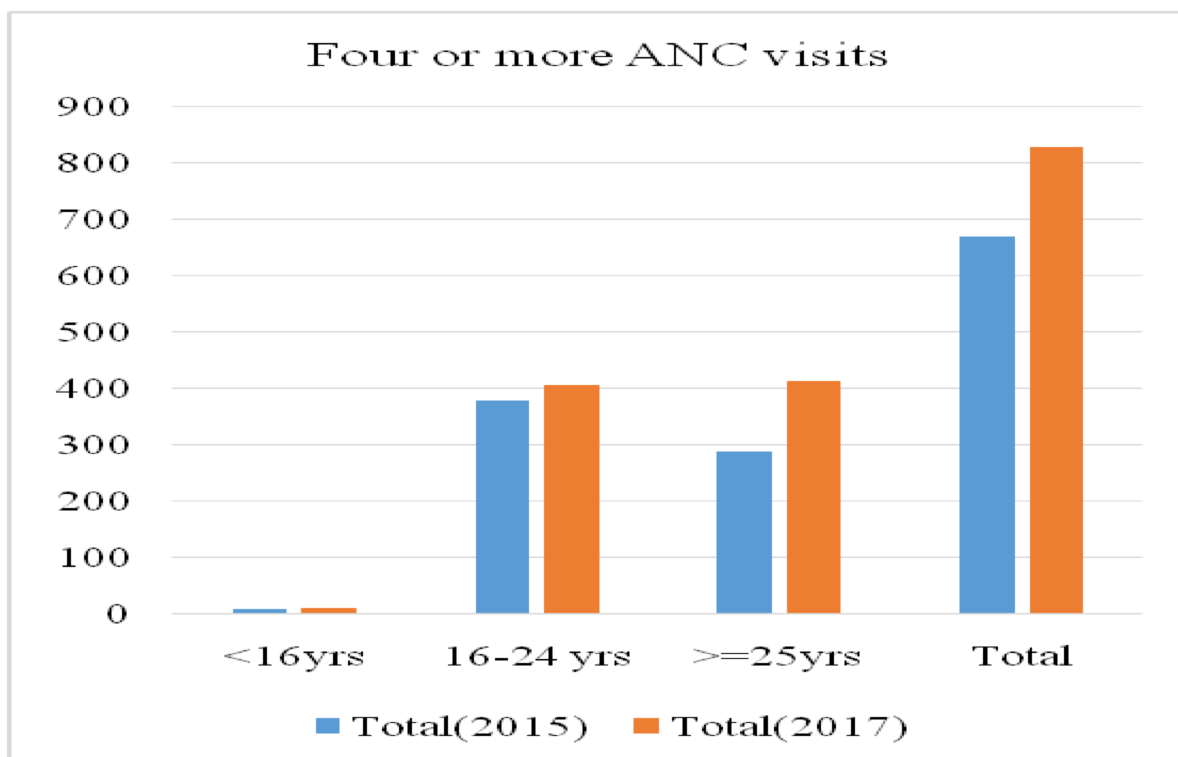


Figure 5.13: Fourth or more ANC visits for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

The proportion of ANC contact repeat visits for second (p=0.38), third (p=0.37) and fourth or more (p=0.77) across all age groups did not differ for the periods June and July 2015 and June and July 2017 at St. Michaels Mission Hospital. In view of the findings in this study where women are facing challenges in attending four or more ANC visits during pregnancy, the WHO (2016) recommendation of increasing the number of ANC repeat contact visits to eight or more might be difficult to achieve. Comprehensive efforts are needed to address socio-cultural, economic, geographical and operational obstacles to reach a health facility that have been cited in this study.

5.3 Comparison of maternal healthcare utilisation during intrapartum period

This section will present and discuss findings on live births, human immune virus status of women at delivery and prevention of mother to child transmission at delivery.

5.3.1 Live, still and early neonatal deaths

The number of institutional live births recorded between June and July 2017 was (395) as those recorded in 2015 during the same period (396) in the district. There was a reduction in the number of live births at home by traditional midwives and others recorded in 2017 compared to 2015. Considering the poor quality of care and negative health ersonnel

attitude recorded in this study, there might be a need for policy makers to engage in more skilled personnel to reduce burn out. Figure 5.14 shows the total number of live births recorded in the district June to July 2015 and June to July 2017.

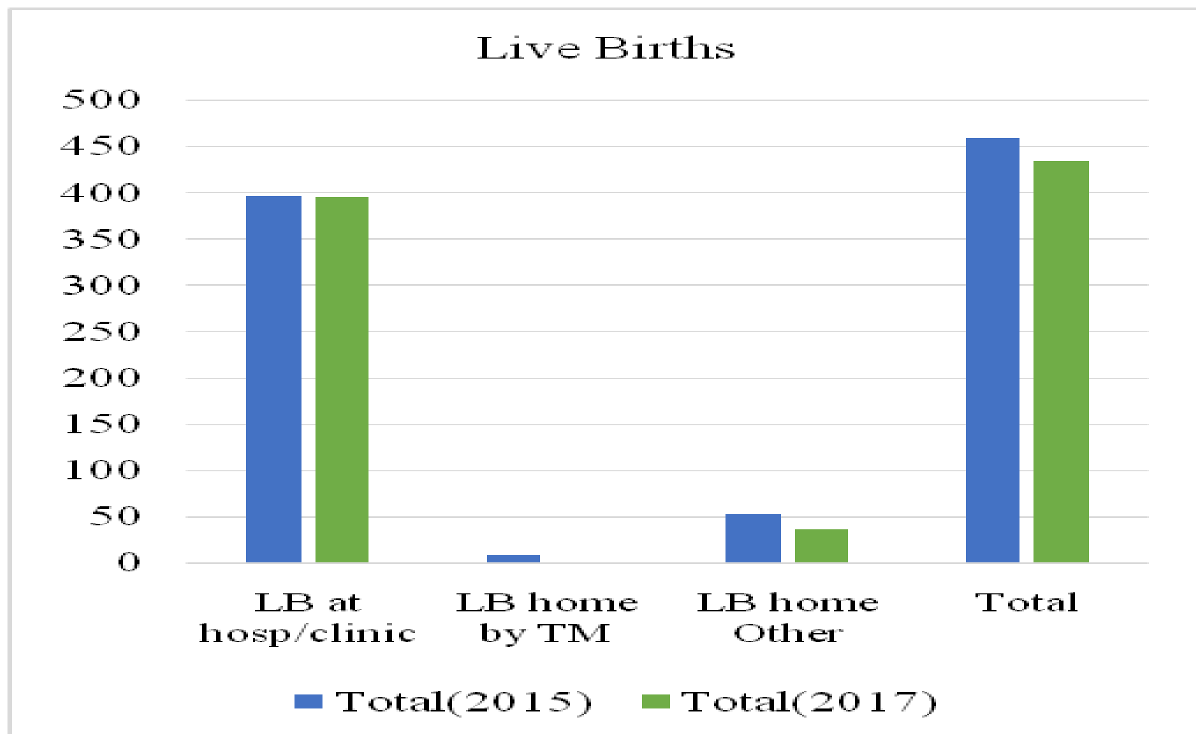


Figure 5.14: Live births recorded for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was no sufficient evidence to show a reduction in the proportion of live births recorded between June and July 2017 compared to the same period in 2015 (p=0.37). However, sufficient evidence was available to show a decrease in the proportion of live births at home in 2017 from June to July compared to the same period in 2015 (p=0.03).

There was no sufficient evidence to show a difference in proportion of live births at home in June and July 2017 compared to June and July 2015 at St. Michaels Mission Hospital (p=-0.12). High (75%) institutional births were also reported in Haiti (Mirkovic, Lathrop, Hulland, Jean-Louis, Lauture, D'Alexis, Hanzel & Grand-Pierre, 2017:4). Contrary to these findings, despite a high coverage of ANC visits during pregnancy, a quarter of HIV infected women delivered at home in Coastal Kenya (Chea, Mwangi, Ndirangu, Abdullahi, Munywoki, Abubakar & Hassan, 2018:8). The number of still births 3 (33%) declined in the district between June and July 2017 when compared to the number of still births 6 (67%) recorded

during same period in 2015. More awareness campaigns need to be intensified in the district to encourage foetal monitoring at home. Figure 5.15 shows the total number of still births births recorded for Mhondoro-Ngezi district June to July 2015 and June to July 2017.

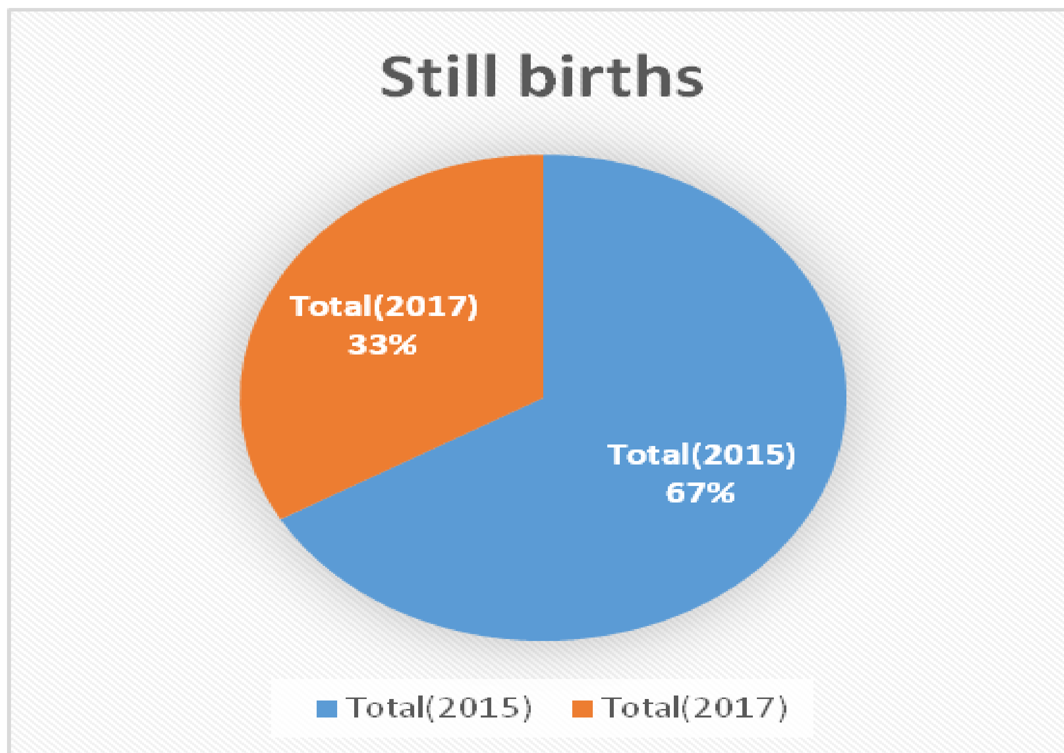


Figure 5.15: Still births recorded for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was however, no sufficient evidence to support the decline in the proportion of still births in 2017 compared to 2015, June to July (p=0.37). There was decrease in the number of early neonatal deaths, 2 (25%), during the period between June 2017 and July 2017 when compared to the same period in 2015 where 6 (75%) early neonatal deaths were recorded in the district. These results are commendable and the trend shoud be maintained through ongoing midifves in-service training and refresher courses on emergency obstetric care.

There was no sufficient evidence available to show a decrease in early neonatal deaths in 2017 compared to 2015 (p=0.19). Data emerging from this study is in contrast with high (51.7%) still births recorded in a study done in Bangladesh (Aktar, 2012:65).

Figure 5.16 shows the total number of early neonatal deaths recorded for Mhondoro-Ngezi district June to July 2015 and June to July 2017.

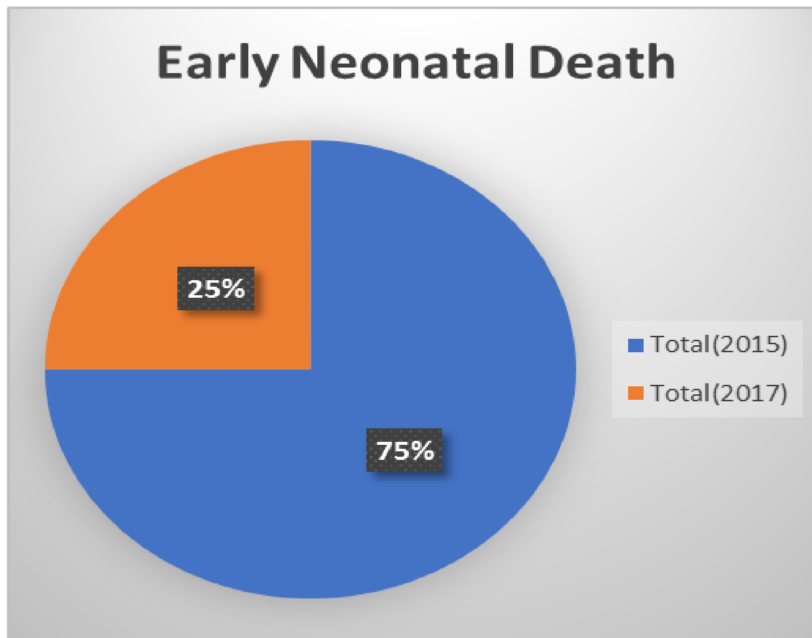


Figure 5.16: Early neonatal deaths for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

5.3.2 Human Immune Virus status of women at delivery

A notable difference was noted on the number of women with an unknown HIV status at delivery in the district. No women were recorded as having an unknown HIV status at delivery from June 2017 to July 2017 when compared to 7 women with an unknown HIV status during the same period in 2015. There was a slight decrease in the number of women with a negative and positive HIV status from June to July 2017 compared to same period in 2015. Figure 5.17 Illustrates HIV status at delivery for Mhondoro-Ngezi for June to July 2015 and July to July 2017.

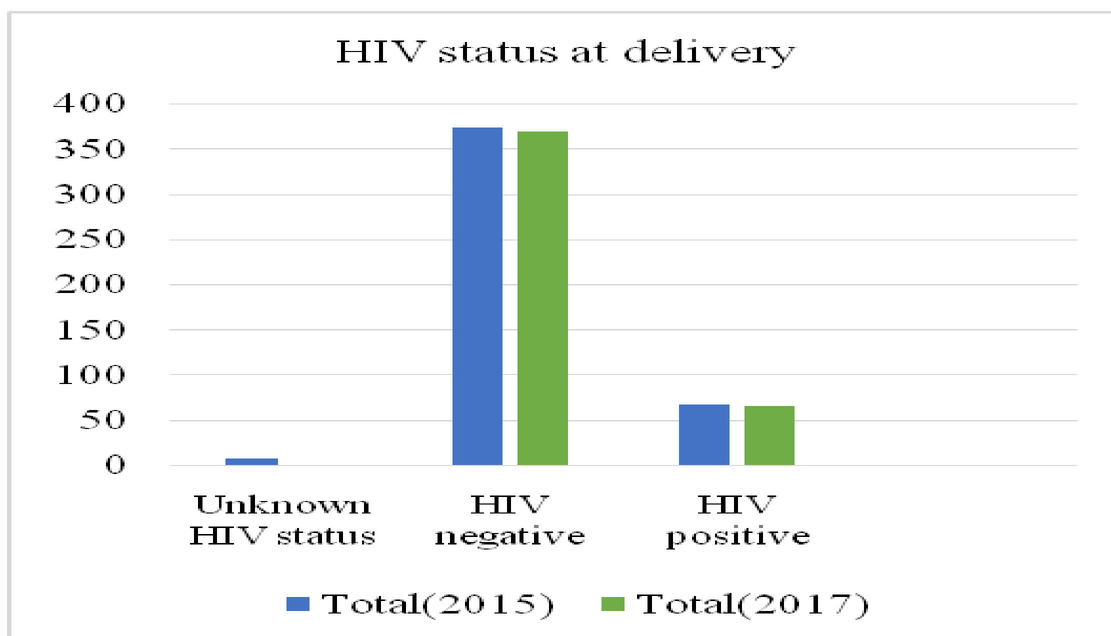


Figure 5.17: HIV status at delivery for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was sufficient evidence to show a decrease in the proportion of women with an unknown HIV status at delivery between June and July 2017 compared to the same period in 2015 (p=0.01). The results after the awareness campaign are indicative that the health promotion activities encouraging women to know hteir HIV status paid off. In addition, national PMTCT programs that were running concurrently with the study could have contributed to the decrease in the proportion of women with unknown HIV status at delivery. No sufficient evidence was there to show a difference between women with a negative HIV status at delivery (p=0.57) and women with positive HIV status at delivery (p=0.94) in 2017 from June to July compared to the same period in 2015.

5.3.3 Prevention of Mother to Child Transmission (PMTCT) at delivery

Of the 66 HIV positive women who delivered between June 2015 and July 2015, 19 (28.8%) mothers had PMTCT compared to 8 (12.3%) out of 65 women who tested HIV positive on delivery in 2017 during the same months in the district. There was sufficient evidence to show a decrease in the proportion of women who received PMTCT from June to July 2017 compared to the same period in 2015 (p<0.001). No difference was recorded for the new born babies who received PMTCT between June and July of the two years.

A significant decrease in proportion of women who had PMTCT (p = 0.02) was also observed for both June and July 2015 compared to the same months in 2017 at St. Michaels Mission Hospital. This indicates that there was an increase of women who had

PMTCT intervention in 2017. The findings also point to a gap in practice that needs to be addressed as some positive women are not accessing PMTCT interventions. There was no sufficient evidence to show a difference in proportion of babies who had PMTCT for both time periods in 2015 compared to 2017 (p = 0.19). A study conducted in rural South Africa by Weiss, Peltzer, Villar-Loubet, Shikwane, Cook and Jones (2014:7) revealed that of the 82 HIV positive women 86% (49) reported taking NVP and/ or ZDV and 84% reported their child received NVP. Figures 5.18 and 5.19 illustrate prevention of mother to child transmission at delivery issued to mother and the babies respectively.

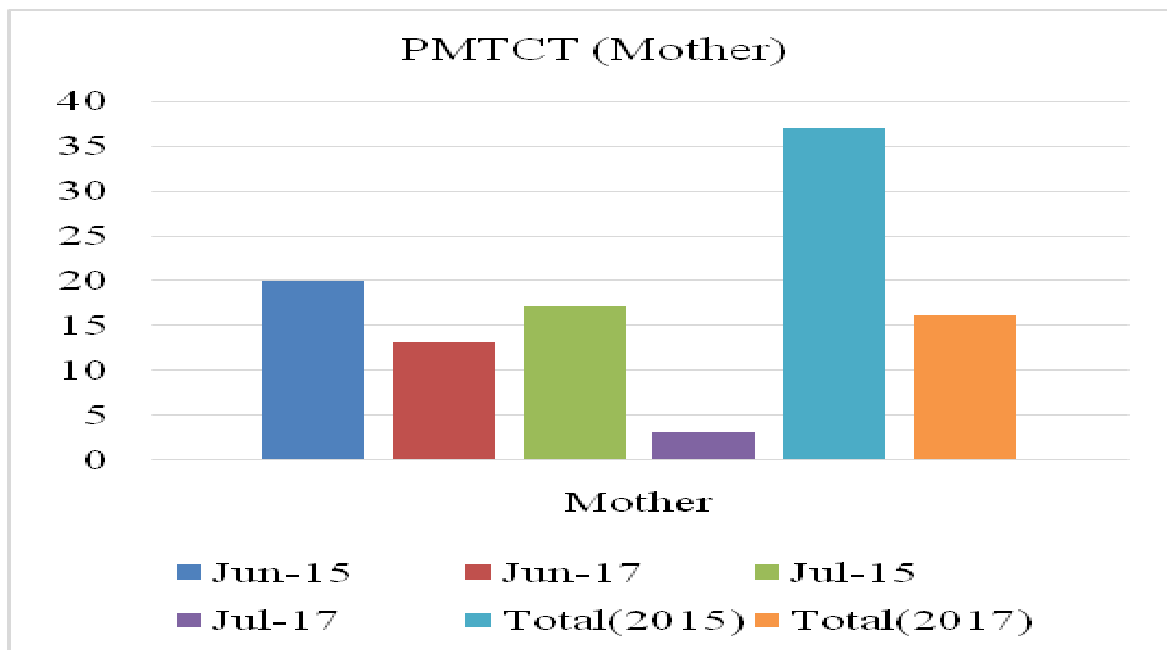


Figure 5.18: Prevention of Mother to Child Transmission (PMTC) at delivery for mothers for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

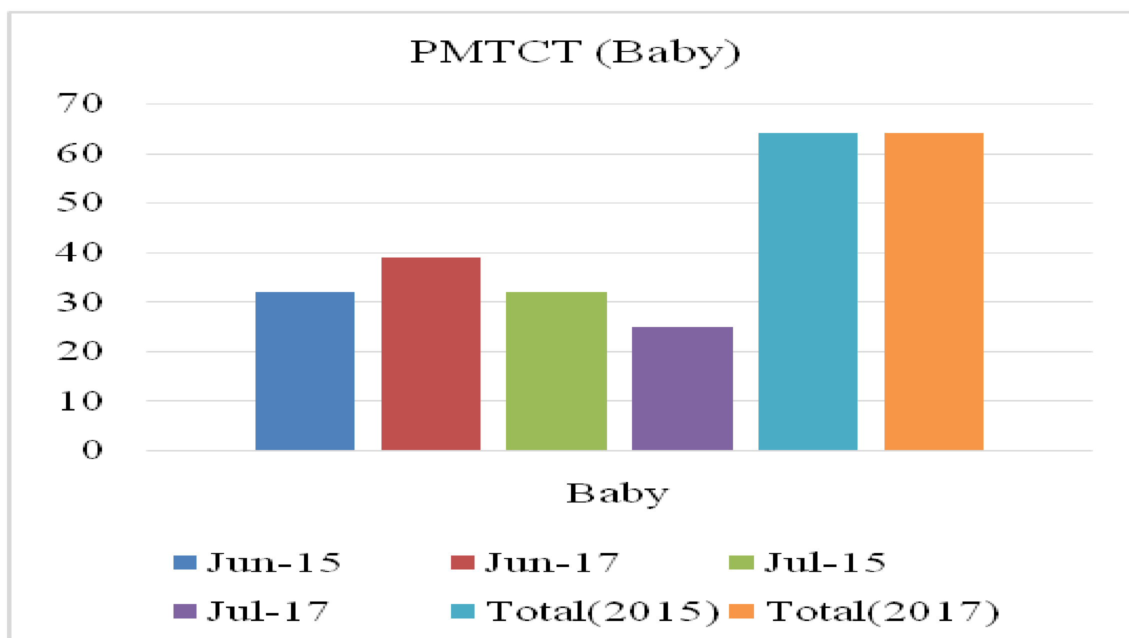


Figure 5.19: Prevention of Mother to Child Transmission (PMTC) at delivery for babies for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

5.4 Comparison of postnatal care utilisation

In this section comparison of postnatal care attendances and Vitamin A supplementation during postnatal period will be discussed.

5.4.1 Postnatal care attendance

Generally, there was an increase in the number of women who had postnatal care in June to July 2017 compared to the same period in 2015 in the district. However, there was a downward trend in the number of women attending from day 1 up to week six in both years. These findings are still indicative that women in Mhondoro-Ngezi district do not attend repeat postnatal visits, especially at six weeks period. More awareness campaign on the importance of these vists should be conducted. Figure 5.20 shows postnatal care visits and Vitamin A supplementation for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

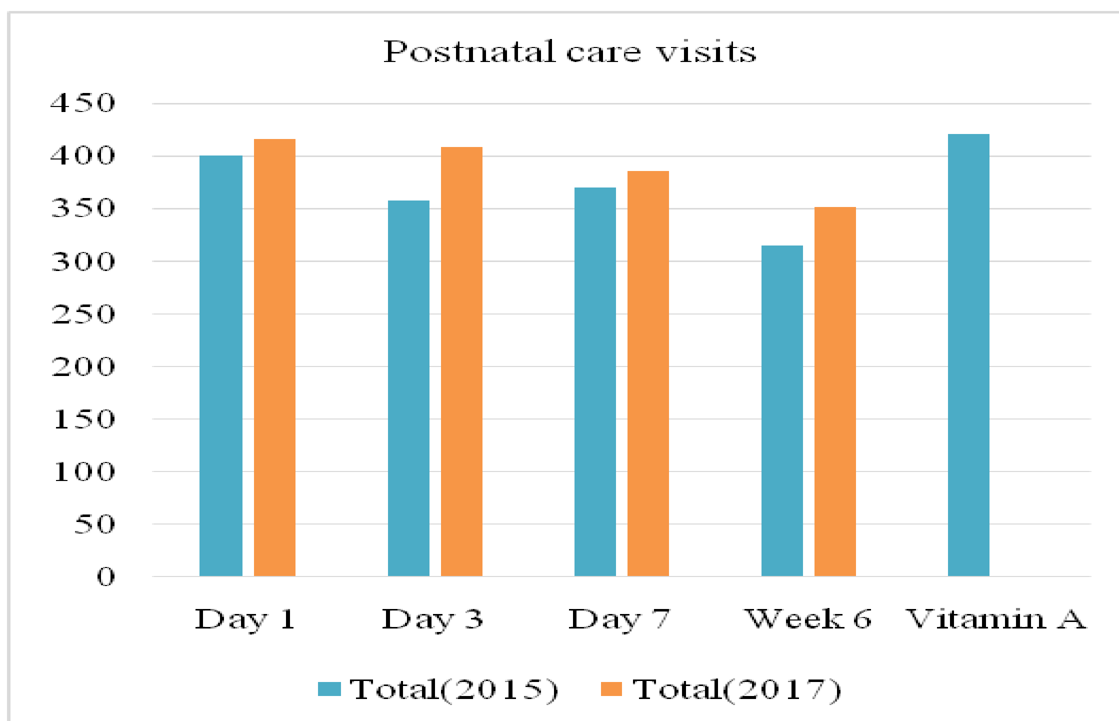


Figure 5.20: Postnatal care visits and Vitamin A supplementation for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

There was sufficient evidence to show an increase in proportion of women receiving postnatal care from June to July 2017 on day 1 ($p<0.001$), day 3 ($p<0.001$), day 7 ($p<0.001$) and week 6 ($p<0.001$) compared to 2015 during the same period. There was sufficient evidence to indicate an increase in proportion of women who had postnatal visit on day 3 in June 2017 compared to the same month in 2015 ($p<0.001$).

Among postnatal women seeking postnatal care in a study conducted in Haiti (Mirkovic, Lathrop, Hulland, Jean-Louis, Lauture, D'Alexis, Hanzel & Grand-Pierre, 2017:4), 67% were attending their first visit (median: 7 days and interquartile range: 0-11 days).

5.4.2 Vitamin A supplementation during postnatal period

There was no Vitamin A supplementation that was given to postnatal women in the district between June and July in 2017 when compared to 421 between June and July 2015 (Figure 5.18). Sufficient evidence was also available to support a marked decrease in Vitamin A administration in 2017 June to July when compared to the same period in 2015 ($p<0.001$). In comparison, during the months of June and July, there was a reduction in proportion of postnatal women given vitamin A in 2015 compared to 2017 and there was sufficient evidence ($p <0.001$) to indicate this. These results indicate an increase in Vitamin A issues after implementation of the initiatives. High Vitamin A supplementation were also

reported in Tanzania where about 75 % postnatal women received Vitamin A supplementation soon after delivery (Smith, Muhihi, Mshamu, Sudfeld, Noor, Spiegelman, Shapiro, Masanje & Fawzi, 2016:2115).

5.5 Comparison of maternal transfer from clinics to the district and central hospital

A general increase in the number of ANC transfers out was recorded in Mhondoro-Ngezi district in 2017 when compared to 2015. On average 21 women were transferred out of the district in June 2017 to July 2017 compared to 15 women in 2015 during the same period. A decrease in the number of ANC referrals out was expected in 2017 compared to 2015. There was however no sufficient evidence to show a difference in number of referrals out in 2017 compared to 2015 (p=0.37). There was a decrease in the number of women referred out of the district in 2017 June to July compared to 2015 June to July. On average, 32 women were referred out in 2015, compared to 24 in 2017 for the months June to July. Presence of a General Practitioner at the district hospital might have contributed to the decline of transfers out in the district. However, no sufficient evidence was available to show a difference in maternal referrals out between June and July 2017 compared to the same period in 2015 (p=0.19). Figure 5.21 shows maternal transfer from clinics to the district for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017.

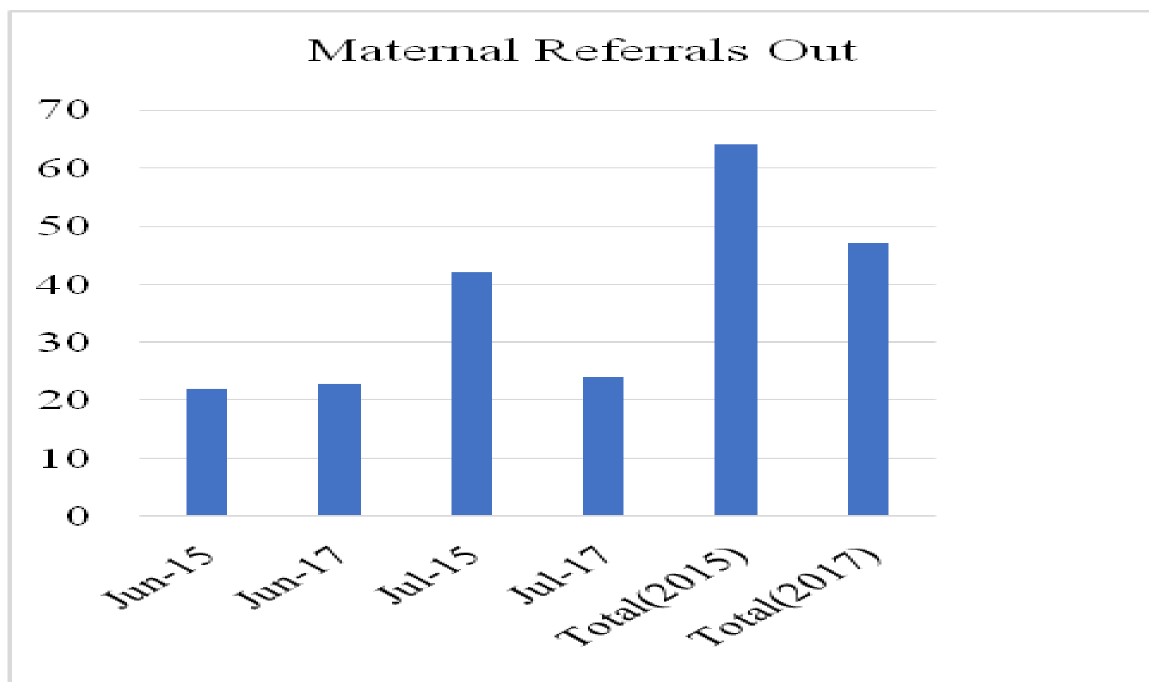


Figure 5.21: Maternal transfer from clinics to the district for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

5.6 Comparison of maternal mortality rates

No maternal death was recorded in Mhondoro- Ngezi district in 2015 between June and July. However, one (1) maternal death was recorded in 2017 during the same period. The cause of death was not known neither was an audit meeting done as the death occurred at a private doctor's rooms.

Mhondoro-Ngezi district June to July 2017 maternal mortality rate

Formula: Death recorded/Total live births X 100 000 live births

1/395 X 100 000 **=253 deaths/100 000 live births**

Findings in both the situational analysis and in Cycle 3 indicate poor follow-up on maternal death. No audit meetings were conducted in both cycles. This is a cause for concern. There is need for proper guidelines and procedure manuals for monitoring maternal death regardless of whether the death occurred outside the government run institutions.

5.7 Comparison of maternity drug availability

Low maternity Vital (169), Essential (131) and Necessary (124) drugs levels were available in the district clinics between June and July 2017 compared to the same period in 2015 whhere the district recorded maternity Vital (201), Essential (141) and Necessary (131) drug levels. Shortage of essential drugs in the district could have contributed to poor utilisation of maternal healthcare services in the district as most people might not see the need to seek healthcare where there are not assured of getting assistance. Figure 5.22 shows maternal drug availability for Mhondoro-Ngezi District June to July 2015 and June to July 2017.

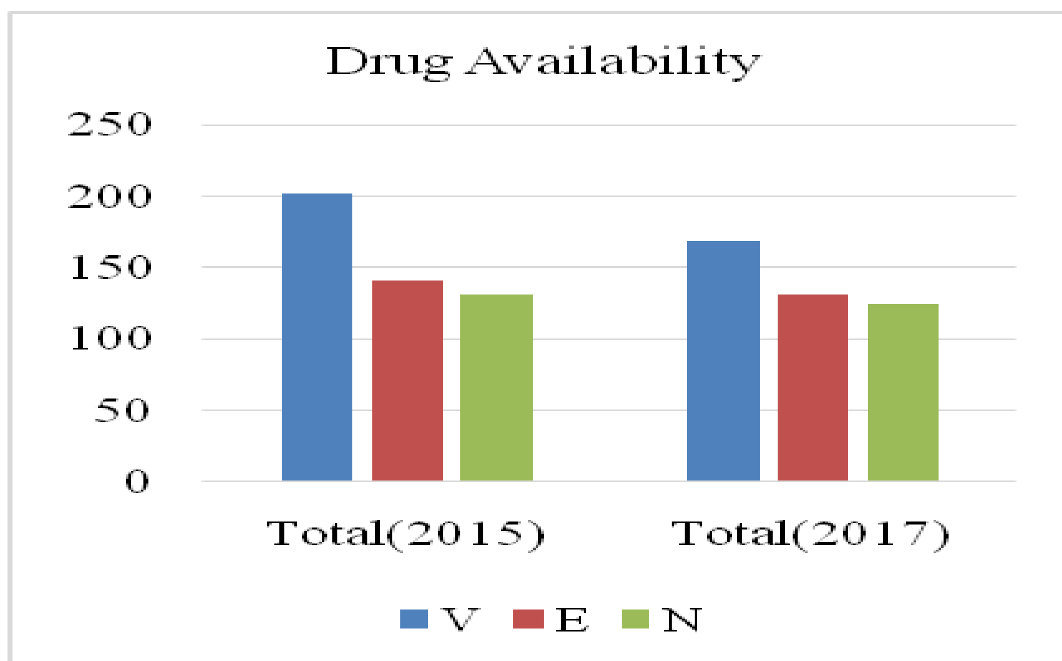


Figure 5.22: Maternal drug availability for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

5.8 Comparison of available resources

There were no major changes on the number of health personnel in June and July 2017 when compared with the same period in 2015. One major change was the availability of one General Practitioner in June and July 2017 compared to none in 2015 during the same period. The operating theatre was still not functional and there was no ambulance in 2017. The community needs to pull resources together and attend to these challenges to improve access to skilled care. Table 5.1 illustrates available resources for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017.

Table 5.1: Available resources for Mhondoro-Ngezi District Jun-Jul 2015 and Jun-Jul 2017

Position	Establishment	In-post	Seconded	Vacancies	Required
District Medical Officer	1	0	0	1	1
Sister-in-charge	1	2	1	1	6
Registered General Nurse	41	41	2	0	6
State Certified Nurse	-	2	0	0	0
Primary Care Nurse	-	17	0	0	0
Midwives	-	14	0	0	0
Nurse Anaesthetist	-	0	0	0	1
Operating Theatre Nurse	-	0	0	0	1
Community Nurse	-	1	1	0	0
Laboratory Scientist	1	1	0	0	1
Laboratory Technician	-	0	1	0	1
Microscopist	-	0	1	1	

Section A presented results of the quantitative analysis. Due to a small sample size, data could not be analysed using test for comparisons and instead proportion test were used. Chi square test was only performed on Day 3 postnatal visit since it was the only attendance that had high figures to allow analysis. Though other attendances recorded an increase, the figures were too small for analysis. An important result here is the relationship between the intervention and Day 3 postnatal attendance. There was sufficient evidence of an association between the intervention given and the increase in the proportion of women who had a day 3 postnatal contact visit, (chi = 5.88, p = 0.02). An increase in Vitamin A issues was recorded after the implementation of the initiatives. There were no maternity deaths reported during June and July 2017 in the district or from patients who were transferred to Harare Central Hospital.

The impact of the initiatives has been statistically significant in the district at day 3 postnatal visit. However, there may have been other developments that could have contributed to the changes recorded in the utilisation of available resources and maternal healthcare services in the district.

The next section will present and discuss the findings from the qualitative analysis.

5.9 Findings: Section B: Comparison of utilisation of maternal healthcare services according to stakeholders

The objective for collecting qualitative data was to compare maternal healthcare services utilisation with baseline data after implementation of initiatives for enhancing utilisation of maternal healthcare services. Since the initial ethical clearance from the University of Pretoria had expired, an extension was requested and same was granted (see Annexure

D). The same ethical clearances from Ministry of Health and Child Care and Medical Research Council of Zimbabwe which were used in Cycle 1 were also used in this cycle as they were still valid. Qualitative data for this objective was collected using three focus group discussions with purposively selected maternal healthcare providers, community members and postnatal women at St Michaels Mission hospital over a period of two days. The population was the same, but the participants were different from the ones used in Cycle 1.

The focus group discussions were audio recorded, transcribed verbatim and translated from Shona into English and back to Shona by the researcher to ensure the translation did not distort the meaning. Tesch's (1990) method of content analysis was used to identify the themes as described chapter 2. The findings contain verbatim quotations from the participants without editing the grammar to avoid losing meaning. The participants are indicated as maternal healthcare provider (MHCP), postnatal woman (PNW) and community member (CM) to maintain anonymity as in Cycle 1.

The same themes used in Cycle 1 were used for presentation of findings in this Cycle. A table will be presented first under each theme followed by excerpts from the group discussions. Literature will be included in the discussions.

5.9.1 Characteristics of the focus group discussion participants

Three focus group discussions with maternal healthcare providers, postnatal women and community members were conducted in August 2017 at St. Michaels Mission Hospital.

- **Maternal healthcare providers' demographic characteristics**

In this study, maternal healthcare providers consisted of midwives and village health workers. As in Cycle 1, there were no traditional birth attendants in this cycle as they were not available for recruitment. All maternal healthcare providers were recruited within the hospital premises. The focus group discussion with maternal healthcare providers lasted 52 minutes and was undertaken at St Michaels Mission Hospital in the staff cafeteria away from disturbances. The group consisted of three female midwives, five female village health workers and one male village health worker. The participants' ages ranged from 28 years to 64 years. This age range allowed young and old community members to share their views and experiences on maternal health issues. Of the two midwives, one had four years experience working as a midwife and the other one had three years experience. The third nurse was a Registered Primary Care nurse with one-year experience post midwifery certificate training. All the nurses were educated up secondary level. Among the five village health workers, four were educated to at least up to secondary level and the other one up to primary level. Level of education determines one's ability to read and write. This is

important especially for both the nurses and village health workers who need to be able to grasp maternal health concepts and to document their practices. Most of the maternal healthcare providers were married with children except for only two. All maternal healthcare providers were Christians and belonged to different denominations. Table 5.2 shows the characteristics of the maternal healthcare providers according to the number each participant selected.

Table 5.2: Maternal healthcare providers' characteristics

MHCP number	Age	Gender	Marital status	Level of education	Profession	Religion	No of children
1	33	Female	Married	Form 4	Village health worker	Pentecost	3
2	32	Female	Married	Form 4	Village health worker	Roman Catholic	3
3	55	Male	Married	Zimbabwe Junior certificate	Village health worker	Apostolic	2
4	31	Female	Single	Form 4	Primary care nurse	Zimbabwe Assemblies of God in Africa	1
5	64	Female	Married	Grade 7	Village health worker	Roman Catholic	6
6	33	Female	Married	Form 4	Village health worker	Anglican	2
7	30	Female	Single	Form 4	Registered General Nurse and State Certified Midwife. Four years maternity experience	Roman Catholic	0
8	28	Female	Married	Form 4	Registered General Nurse and State Certified Midwife. Three years maternirty experience	Methodist	0

- **Postnatal women's demographic characteristics**

The focus group discussion with postnatal women was undertaken in a small hut within the hospital premises near the mothers' waiting home and it lasted 55 minutes. All participants were recruited within the hospital premises. There were nine participants in the focus group discussion and their age ranged between 18 to 38 years. One of the participants was illiterate and did not know her age. While other participants appended their signatures on the consent form, the illiterate participant inserted an X after the purpose of the study was explained to her together with other participants. Most of the participants were married housewives and only two of the participants were single. Most of the participants were educated up to secondary level except for only one who was illiterate. Among the postnatal women one was a nurse who was also seeking maternal healthcare services at the hospital

and was currently not practising. With regards to religion, all the participants were Christians. All the participants were seeking postnatal care services and they met the inclusion criteria. Table 5.3 shows the demographic characteristics of postnatal women.

Table 5.3: Postnatal women's demographic characteristics

PNW number	Age	Gender	Marital status	Level of education	Profession	Religion	No of children
1	18	Female	Married	Form 4	House wife	Roman Catholic	1
2	30	Female	Single	Form 3	House wife	Apostolic	1
3	23	Female	Married	Form 4	Postnatal woman and midwife. Two years experience	Apostolic	2
4	Unkown	Female	Married	No schooling	House wife	Seventh Day Adventist	6
5	23	Female	Married	Form 4	House wife	Roman Catholic	2
6	29	Female	Married	Form 3	House wife	Roman Catholic	4
7	24	Female	Married	Form 4	House wife	Apostolic Faith Ministry	1
8	38	Female	Married	Form 4	House wife	Roman Catholic	5
9	17	Female	Single	Form 1	Unemployed	Methodist	1

- **Community members' demographic characteristics**

A focus group discussion with eight purposively selected community members was conducted at St Michaels Mission Hospital under a tree away from the day to day activities of the hospital and lasted 59 minutes. The group consisted of six women and two men whose age ranged between 31 and 70 years. Most of the community members were female and only two were males. Seven of the community members were married, one was widowed and the last one was divorced. Three of the community members were educated up to secondary level and five up to primary level. All the community members had children with the number of children ranging from one to five children. All except one community member cited their denomination. The religious teaching has an impact on the perceptions regarding utilisation of maternal healthcare services. Table 5.4 summarises the community members' demographic characteristics.

Table 5.4: Community members' demographic characteristics

CM number	Age	Gender	Marital status	Level of education	Profession	Religion	No of children
1	70	Female	Divorced	Grade 7	Community member	Apostolic	4
2	50	Female	Widowed	Grade 7	Community member	Apostolic	1
3	55	Male	Married	Form 2	Community member	Roman Catholic	5
4	65	Female	Married	Grade 7	Community member	Apostolic	5
5	34	Female	Married	Form 2	Community member	Pentecost	3
6	51	Female	Married	Grade 7	Community member	Apostolic	4
7	42	Female	Married	Grade 7	Community member	No religion	4
8	31	Male	Married	Form 4	Community member	Anglican	1

5.10 Barriers to utilisation of available resources and maternal healthcare services

For purposes of comparison with the findings from Cycle 1 before development and implementation of initiatives and after the implementation of the initiatives, the same themes used in Cycle 1 were used to present the findings in this cycle. In Cycle 3 some sub-themes remained the same as those in Cycle 1 and new themes emerged. Participants also proffered their perspectives on what could be done to enhance utilisation of maternal healthcare services. Table 5.5 presents the summarised barriers and underneath the table, each theme will be discussed separately.

Table 5.5: Barriers to utilisation of available resources and maternal healthcare services

Barriers	Antenatal	Intrapartum	Postnatal
Maternal healthcare system related	Health personnel attitude	Health personnel attitude (rudeness, fear, justify abusive conduct)	Health personnel attitude (insensitive, rudeness
	Long waiting times		Long waiting times
	Incidental costs and user fees		
	Distance to health facility and transport problems	Distance to health facility and facility problems	Distance to health facility and transport problems
	Presence of male midwives	Presence of male midwives	Presence of male midwives
	Lack of resources at the maternity waiting home (no medicine, no food)	Shortage of resources at healthcare facilities (shortage of skilled staff and staff not paid)	
		Transfer process	

		between hospitals	
	Disregard for indigenous health practices	Disregard for indigenous health practices	Disregard for indigenous health practices
		Discourage husband/ partner involvement	
Maternal healthcare user related	Lack of knowledge (illiteracy)		Lack of knowledge (illiteracy)
		Fear of reporting abusive treatment	
	Fear of HIV testing		
	Perceived number of ANC contact visits		
	Maternal healthcare user attitude	Maternal healthcare user attitude	Maternal healthcare user attitude
	Age and experience	Age and experience	
	Other responsibilities-children at home		
	Reluctance to book during ANC		
	More trust in the help provided in the community		
			Perceptions regarding male midwives
	Healthcare system use problem based	Healthcare system use problem based	
	Poverty- not able to pay for investigation	Poverty-leading to feelings of shame	Poverty- leading to feelings of shame Poverty- not able to pay for family planning
	Physical factors-side effects of drugs	Physical factors-fast labour	Physical factor-pain, discomfort
Support system related	Lack of spousal support and involvement (perceived)	Lack of spousal support and involvement (perceived)	
	Partner afraid of HIV testing		
	Partner refuses HIV testing		
	Partner not at home	Partner not at home	Partner not at home
		Perceived fear of women's anger	
		Lack of community support	
Culture related	Use of herbs (and other indigenous practices)	Use of herbs (and other indigenous practices)	
	Cultural beliefs and norms (pregnancy must be concealed during the first few months)		
	Fear of witchcraft	Fear of witchcraft	Fear of witchcraft
	Sanctioning of cultural norms		
Religious related	Fear of mystic forces		

	Religious healing practices (water)		
		Church doctrine (not allowed to use hospitals)	Church doctrine (not allowed to visit clinics, no family planning at mission hospital)

5.10.1 Maternal healthcare system related barriers

Health personnel attitude, incidental costs and perceived user fees, distance to health facility, presence of male midwives and shortage of resources at health facilities were reported before and after implementation of the initiatives. Long waiting times, lack of resources at maternity waiting home, demotivated staff, transfer process between hospitals and disregard for indigenous health practices were not reported after implementation of the initiatives and will not be discussed. New barriers that emerged after implementation of the initiatives were discouragement for husband/ or partner involvement and transport problems. The barriers that were mentioned before and after implementation of the initiatives will be discussed first followed by the barriers that emerged in this cycle and these are summarised in Table 5.6.

Table 5.6: Maternal healthcare system related barriers

Antenatal	Intrapartum	Postnatal
Incidental costs and perceived user fees		
Health personnel attitude and conduct	Health personnel attitude and conduct (rudeness, fear, justify abusive conduct)	Health personnel attitude and conduct (insensitive, rudeness
Health personnel attitude towards indigenous practices	Health personnel attitude towards indigenous practices	Health personnel attitude towards indigenous practices
Distance to health facility and transport problems	Distance to health facility and transport problems	Distance to health facility and transport problems
	Discourage partner involvement	
	Presence of male nurse	
	Staffing problems (shortage of skilled staff and staff not paid)	
	Inadequate resources (no medicine, no food)	

Maternal healthcare related barriers will be presented with supporting evidence from the focus group discussions. Disrespect for and abuse of women at the hospital and health personnel attitude towards indigenous practices emerged as barriers for utilisation of maternal healthcare services in both Cycle 1 and this cycle and will be discussed next.

5.10.1.1 Health personnel attitude and conduct

Health personnel attitude and conduct towards women is cited in literature (Olayinka, Achi, Amos & Chiedu, 2013:14) as major determinants on women's decision to whether to use or not to use the available maternal healthcare services. Participants in this cycle reported that women were insulted when seeking health services, in most instances for minor omissions.

CM 8: *The reason women do not come to hospital is because of the way they are treated by nurses. They are insulted.*

Being asked questions about the ANC book and baby card was strongly condemned by the participants and cited as the reason women did not want to come to hospital for ANC visits and postnatal review respectively. The participants understood that nurses should teach them on health issues, but they argued that there was no need for them to be asked questions. When women failed to answer the questions, the participants reported that women were insulted. The following are the verbatim quotations:

CM 6: *They should not ask women questions about the baby card. If you do not answer properly, you are insulted.*

CM 8: ……*They ask her the name of the injection she has come in for. She doesn't even know and maybe she has never gone to school. She will be insulted. Tomorrow she will not come back. That is the problem.*

CM 4: *Yes, nurses should teach women only and stop asking them questions. Ha-a this issue of being insulted causes most women not to come. Nurses should stop insulting people. They should not ask them. They should just teach them. Most women do not want to be asked questions. That is why they do not come back. Just teach them. Why should you get tired? Continue teaching them.*

CM 7: *Yes. You are asked to go out if you fail to answer the question.*

Apart from failing to answer questions correctly, some women were insulted by nurses because their maternity cards were not covered. Because of fear of being insulted by nurses, some women reportedly wrote in the maternity cards imitating the nurses' writing if they had missed some visits.

CM 4: *Others are insulted because of cards, the card! Others would have covered it nicely and some are unable to do that. Others say it is better for me to deliver at home than go to hospital.*

CM 8: B*ut then at the clinic if you look closely she will write in the card herself copying their handwriting.*

MHCP 6: *Sometimes I think nurses are justified when they beat you. Because sometimes they will be speaking to you nicely so that you have a live baby, but you are restless and not cooperating. A nurse will be afraid of losing their job. In case the baby ends up with some problems or worse, the nurse will be blamed.*

Participants also commented that sometimes women are subjected to physical abuse. To explain how the abuse comes about, one of the maternal healthcare providers reported that it happens impulsively as the healthcare provider will be instructing the woman to open her legs.

MHCP 8: *It is not like the nurse has already planned that they will beat you. But she will be telling you to open your legs then you close them because of the pain and the nurse says, I said open your legs (slapping the woman).*

Consistent with these findings, a study done in Amassoma community, Bayelsa State in Nigeria (Olayinka, Achi, Amos & Chiedu, 2014:12) noted that 84.4% of the participants cited negative health personnel attitude as one of the major barriers to utilisation of maternal healthcare services. Similarly, in Malawi, Machira and Palamuleni (2018:29) reported that women in their study reported that some health personnel used vulgar language when women requested to be assisted during delivery. These attitudes and behaviours impact on the women's ultimate decision on whether to use or not use the available maternal healthcare services.

Most of maternal healthcare providers believed the nurses' behaviour in labour was justified as they will be trying to save the baby.

MHCP 2: *Yes, it is alright for the nurse to be harsh on the woman during childbirth because they are saving your baby.*

MHCP 3: *The person who goes home without a baby it's you, yet you experienced pain. So the health care providers are trying to ensure that you go back home with your baby.*

MHCP 5: *I will be accepting such treatment because I will be thinking that they are helping me to ensure my baby will live. Because if they are lenient with me I will continue closing my legs and if they leave me to do as I wish I will kill my baby.*

These findings are a cause of concern as abuse in childbirth continuous to be normalised despite the training of maternal healthcare providers on respectful maternity care (refer to

chapter 4). There is need for intensive awareness to change the community's mind set on the matter.

MHCP 3: *In my opinion, I want to look at this referring to a teacher. If a teacher was beaten at school when one becomes a teacher, they will want to revenge on the school children. You will see the teacher beating them. So that is the same situation with nurses, these nurses. If they were beaten when they were taught, they will do the same. It is now in the person.*

MHCP 5: *I see as if since they will be at their work place they say we are doing serious business. So they see as if women are fooling around*.

MHCP 6: *They may tell you that 'Hey you, we were not there when you were doing your things.'*

MHCP 5: *Long back nurses used to hit women with a plank.*

MHCP 1: *It used to happen long back. The nurses that are there now are young, they do not hit patients. I heard that long back when they tell you that you will go back home with 'a card box with a cabbage' if you fool around in labour.*

MHCP 6*: That meant a dead baby.*

MHCP 1: *If you fooled around you would go home with a card box [dead baby]. So if you were hit it was okay as long as you eventually go home with your baby.*

MHCP 2*: Some of the problems come when workers do not get their salaries on time. They may employ delaying tactic and sometimes they will notice that their needs are not being met. Sometimes they stop working because they will not have been paid.*

Speaking on health personnel attitudes Okonofua, Ogu, Agholor, Okike, Abdus-salam, Gana, Randawa (2017:5) reported that women in a study in Nigeria complained that staff do not give attention to women in labour although some will be shouting and crying. In the same study, negative health personnel attitudes were reported across all health personnel and were not done by nurses only. Review of literature has also shown that negative health personnel attitude towards women is more rampant in public health facilities. For example, a survey done in Tanzania (Boller, Wyss, Mtasiwa & Tanner, 2003: 118) revealed that women attending private health facilities reported that health personnel showed interest in them, were respectful, polite, were not interrupted during conversations and were asked about their concerns.

The poor health personnel attitudes and conduct in this study are probably a manifestation of poor working conditions and lack of knowledge of the clinical procedures and protocols. To motivate staff and reorient midwives the hospital authorities need to improve working conditions and retrain midwives on obstetric care procedures. Management at St. Michaels Mission Hospital need to organise therapeutic communication workshops and seminars.

Poor quality of care and services and unprofessional conduct hinder utilisation of available resources and maternal healthcare services. One postnatal woman shared her experience with other participants and narrated how the nurse shouted at her when her waters broke and accused her of forcibly pushing the baby out before it was time to do so. The women said she was left unattended and as she was pushing the baby out, the nurse realised that the woman was delivering and rushed to assist. The postnatal woman said the nurse further complained that she was forced to deliver the baby without putting on gloves.

PNW 3*: I was not treated well when I came to deliver my second baby. My waters broke late and every time I coughed the nurse would shout at me saying I am trying to force it to break. When the waters broke the nurse did not come. I pushed the baby unattended, the nurse was not there. The nurse came running without wearing gloves to deliver the baby. She shouted at me and said she was now delivering the baby without gloves.*

The issue of poor-quality care seems to continue as reported by one postnatal woman that, despite having booked for ANC, women are sometimes not treated well.

PNW 6: *It depends. Sometimes you don't get treated well even after you have booked.*

Consistent with these findings, in a study done in Malawi by Pell et al (2013:6), pregnant women were motivated to book early for fear of chastisement by health personnel. Poor quality of care was also cited in a study conducted in eThekwini district in KwaZulu-Natal by Sibiya, Ngxongo and Bhengu (2018:4), where opening hours were affected by shortage of health personnel resulting in no provision made for accessing health services when clinics were closed.

Participants also questioned the skills of the nurses after one patient delivered unattended immediately after being examined by a nurse. Regarding lack of confidence in the nurse's skills one community member said:

CM 3: *There was a woman who delivered in the waiting home unattended yet the nurse had just examined her. We don't know whether it is because the nurse does not know or not.*

Inability to communicate important health information by health personnel emerged as another barrier to utilisation of maternal healthcare services. For example, one of the participants noted that instead of midwives communicating to patients verbally when the next review date will be, the midwives write the instructions down and assume the patient will read what they would have written. Women who cannot read what is written down will not know when they should return to the hospital for review. Expressing their views participants commented,

MHCP 8: Sometimes *it is the nurse's fault. When we have finished attending to the woman we may forget to tell them the review date, yet you will have written it down.*

Participants reported that utilisation of maternal healthcare services would improve if health personnel treat women with respect and dignity and allow them to make decisions in matters that affect their health. The following excerpts reflect the participants' recommendations,

CM 7*: If nurses treat women well they will come to hospital*

CM 6*: Yes, if they treat women with respect, women will come to hospital.*

MHCP 5: *Nurses should have compassion for women***.**

MHCP 2: *Nurses should ask women for their opinion.*

Tswane and Susuman (2014:8) also observed that women who had bad experiences with healthcare services before were unlikely to return. Consistent with these findings, poor quality of care was also reported in a study done by Okonofua, Ogu, Agholor, Okike, Abdus-salam, Gana and Randawa (2017:5) at a referral hospital in Nigeria.

After the training of maternal healthcare providers on respectful maternity care and universal rights of the child bearing woman and adoption of the check-list to monitor health personnel's interaction with maternal healthcare services users, there was slight change in health personnel attitudes. A possible explanation is that the evaluation was done too soon. Moreover, change is a process hence there is need for continued monitoring and feeding back the findings into practice.

These findings point to poor communication skills on the part of the health personnel. Consistent with these findings, lack of communication led to fear and anxiety when health personnel performed clinical procedures on women without warning in Zambia (Phiri, Flykesnes, Ruano & Moland, 2014:6). To establish a trusting relationship with women, health personnel need to create good rapport and a conducive environment for open

consultation and collaborative care. Based on the findings of this study, there is a need for midwives retraining on communication skills and obstetric care to improve quality of care rendered to women.

Participants suggested that more village health workers should be recruited to ensure that women who do not come to health facilities due to negative health personnel attitudes are served in the communities they reside, replace old village health workers and reduce workload.

CM 2: *We look forward to the village health workers checking the maternity records books too to see if pregnant women are coming for review. I also want to add that the areas the village health workers cover are too big. But for them to move around is a problem because there are many people in the community. They should be many in an area. Some villages have a lot of people so for the village health worker to cover all of them that can be a problem.*

CM 4: *I see as if the village health workers are old. They should have been young so that they would be able to use the bicycles there were given. And when they are old people, riding bicycles will be painful to them.*

CM 5: *I think those who deal with health issues in the community were put there to help people. In my opinion, most of them are not working effectively. They are working in their homes. They are not moving around doing the job that they were told to do. These people should move around. Just as number 7 said, these people should move around. They should have time to have meetings with the people. Like what happens in churches. They say Thursdays are for women's church. They should also have their own day when they ask all women to come for meetings so that they can teach community members about issues to do with life.*

CM 2: *There should be a mix of men and women village health workers. If it's a man, he is called father health (baba hutano) so that he can also give information to men*.

The study substantiates the role of community health workers in creating awarenss on health issues. Community health workers are members of the communities who reside in the communities where they work, selected by the community members, are answerable to the communities for their activities, supported by the health system but not necessarily a part of its organisation and have shorter training than professional workers (WHO, 2007:6). Due to proliferation of many health programmes, there are different types of community health workers in Zimbabwe, but the most common ones are the village health workers

(commonly known as *mbuya hutano*). Village health workers are engaged on voluntary basis by the Ministry of Health and Child Care and are occasionally given incentives, such as groceries and cash, to motivate them.

Consistent with these findings, Butrick, Diamond-Smith, Beyeler, Montagu and Sudhinaraset (2014:7) reported that in Nigeria, village health workers and ward development committees helped incentivise women and act as an accountability mechanism and raised awareness in communities where they work. Moreover, since community health workers are also members of the community and are from the same cultural background, community members feel free to seek clarification on any health information.

5.10.1.2 Health personnel attitude towards indigenous practices

Lack of support and understanding of indigenous practices was also cited as the reason women do not disclose use of herbs in childbirth to midwives in Cycle 1.

MHCP 1: *Women do not tell nurses that they have taken herbs when they are delivering because they are afraid the nurse will shout at them.*

MHCP 7: *Sometimes the women tell us that they have taken herbs. When she tells us we tell her that next time when she is pregnant she should not take herbs, the baby comes out when it is ready to do so.*

Lack of cultural sensitivity was also reported in Ethiopia (Yousuf, Ayalew & Fentaw-Seid, 2011:12). In the study, participants reported that formal health system was not sensitive to the preferences and traditions of the community members as evidenced by not availing beds that allow women to deliver in semi-sitting position as per the women's tradition.

Strategic approaches are needed to encourage women to disclose to the midwife attending to them about herbs taken to augment labour so that midwives become alert and monitor the women closely. Although women were sensitised during the awareness campaign that was organised and undertaken by the CIG members on the need to disclose use of herbs during childbirth to the midwife attending to them, there might be a need for more campaigns in the district to encourage open discussion and communication between maternal healthcare providers and women.

5.10.1.3 Distance to the health facility and transport problems

Utilisation of maternal healthcare services is influenced by accessibility. If women cannot access services, then use of the services is affected. Distance to health facility was cited as an obstacle to follow-up visits attendance and institutional delivery before and after

implementation of the initiatives. The following excerpts describe the magnitude of the problem,

PNW 3*: Women may deliver on the way because of the distance from the hospital.*

PNW 5*: It depends with where you are coming from. If you stay far away, you don't come here at the hospital a lot.*

CM 3: *It is difficult for some women to walk to the hospital. Some of them live far away from the hospital.*

CM 4: *But then the clinic will be far away and the woman ends up not coming to hospital and stay at home.*

CM 2: *Another woman may live far away and may have travelled far. The distance may force her not come back to hospital after delivery. She will be staying far away. This can cause her not to come back.*

PNW 2*: Most women delay coming when there are in labour because the distance to the hospital is very far.*

The rural set-up presents a challenge to policy makers as households are scattered and far away from the health facility. Consistent with these findings, long distance to health facility was also cited as a barrier to utilisation of maternal healthcare services in Malawi (Machiro & Palamuleni, 2018:29) and rural Ethiopia (Bedford, Gandhi, Adamssu & Girma, 2012:5).

Lack of transport at the hospital and fares that are charged when one is transferred to the central hospital deter women from seeking maternal healthcare services. In this study, community members preferred using free transport because most of them were unemployed and could not call an ambulance because they didn't have the money to pay for the ambulance. The following is what the participants in a focus group discussion with community members had to say,

CM 4: *Although ambulance may be available, one needs to have money.*

CM 6: *From here (St Michaels' hospital) to Harare one is asked to pay $60.*

CM 2*: Aah we have never seen an ambulance coming to collect anyone in our area. There are no ambulances at the hospital.*

CM 8: *Even when you call the ambulance, our ambulances are scotch cart. They are our ambulances. We do not have any other means of transport. Most of us here are unemployed. When you call the ambulance, it needs money. So, you choose to use transport that is free and available.*

CM 6: *Even though it shakes and jolts you there is nothing one can do. That is our form of transport here.*

CM 8: *It is our tradition. We grew up seeing people using scotch carts. When there is a problem we bring women to hospital in a scotch cart. When you know that days for delivering are approaching, cows should sleep in the kraal every day, even when money is there. If you do not have a scotch cart, you should be friend those who have scotch carts.*

Transport problems in rural areas is not peculiar to Mhondoro Ngezi district but also across developing countries, for instance, other studies in other countries like South Africa (Alabi, O'Mahony, Wright & Ntsiba, 2015:6; Sibiya, Ngxongo & Bhengu, 2018:4), Malawi (Machiro & Palamuleni, 2018:29) and Ethiopia (Bedford, Gandhi, Admassu & Girma, 2012:5) have shown that transport problems prevent women who live far away from health facilities from using health services. Most rural communities rely on ox or horse drawn scotch carts which in most instances are not reliable. Contrary to these findings, in Eastern Cape in South Africa, Alabi, O'Mahony, Wright, and Ntsaba (2015:4) reported that in an emergency, when the public Emergency Medical Service ambulances were unavailable, women hired private transport.

There is need for policy makers to re-strategise on transport issues to ensure all women have access to maternal healthcare services. For example, one of the strategies that were set up to address transport problems in remote areas of Zambia included introduction of bicycle ambulances to facilitate transportation of women in labour (Phiri, Flykesnes, Ruano & Moland, 2014:7). However, the strategy failed to address the problem because the bicycles were kept at the health centre and not in the community where they were supposed to be used.

The strategy that was put in place at Murambwa Clinic of engaging private transport operators to assist women who need transport to a health facility and those transport operators are paid using resource-based fund, shows a potential for addressing transport woes only if the new arrangement is communicated to women, as the study showed that most women were not aware of the arrangement. However, sustainability of the initiative is threatened because the problem of relying on donor funding is that, when funders decide to withdraw their funding, the problem of transport will emerge.

5.10.1.4 Incidental costs and perceived user fees

Participants complained that the hospital had no ultra sound scanning services and because women did not have money to have it done at a private radiology facility, the women would not return to the hospital since health personnel would have told them not to come back if the scan was not done. The women reportedly would stay at home until delivery time.

CM 8*: The problem that causes women not to come is that they are told that they should go and have an ultra sound scan done inorder to see if the baby is okay. Most women do not have the money to have it done at a private facility. At the hospital there are no scanning facilities. The nurses tell you not to come back if the scan was not done. Most women will not come back. They say we will see when we are delivering.*

Unavailability of ultra sound scanning equipment at St Michaels Mission Hospital affected quality of care delivered to women in need of such investigations during ANC and ultimately affected subsequent return visits as women who failed to have the procedure done elsewhere stayed at home and reportedly returned for delivery. WHO (2016:2574) recommends one routine ultrasound scan to be performed before 24 weeks of gestation period. Consistent with these findings, Machiro and Palamuleni (2018:29) reported that some facilities in Malawi did not have ultra sound scanning devices to perform routine procedures. Failure to have the ultra sound scan done means that gestational age, feotal abnormalities and multiple pregnancies are not determined and detected. But having noted the importance of having the scan, poverty was a major issue in this study and unless addressed out of pocket direct or indirect costs will continue to discourage women from using maternal healthcare services.

Against a background of lack of information on free healthcare services for women during pregnancy, delivery and up to six weeks after delivery and their babies among the participants in Cycle 1, it was interesting to note that some participants in this cycle were aware that maternity care was free after the awareness.

MHCP 5: *Most women use hospitals because pregnant women do not pay.*

This finding is suggestive that the awareness campaign that was undertaken to sensitise women and community members on free maternity care had an impact. Review of literature by Hatt, Makinen, Madhavan and Conlon (2013:69) revealed that, generally, user fees waiver for all services for pregnant women and newborn babies resulted in an increase in institutional deliveries in most studies.

5.10.1.5 Discourage husband/or partner involvement

Husband/ partner support during childbirth is important for emotional well being of the woman during parturition (Sapkota, Kobayashi, Kalehashi, Baral & Yoshida, 2012:2). UNDP, UNFPA, WHO & World Bank (2016:1) recommends that a parturient woman be allowed a birthing companion of her choice of whom she can trust and feels at ease with. However, sometimes this recommendation is not followed up as evidenced by findings in this study. Consistent with findings from Cycle 2 where CIG members pointed that some health personnel discourage husband involvement, one male community member in this cycle also complained that some nurses prevent men from entering the delivery room when their wives were delivering. These sentiments were expressed in the following sentence,

CM 8: ….*The problem is that nurses do not want us to get in when they are delivering our wives.*

In this study, the probable reason why health personnel did not allow men to enter the delivery room could be because of lack of privacy in the labour room. During the training of health personnel, the midwives complained that the labour ward was small, and the screening curtains were inadequate to afford privacy to women in labour. However, the above sentiment shows lack of communication on the part of the midwives. Midwives need to inform husbands/ or partners the reason behind their refusal to allow them to enter labour ward when their wives are delivering so that the accompanying partner will understand the reason they are not allowed in the labour ward. Alternatively, separate male friendly waiting areas can be provided for men accompanying their wives.

Lack of privacy in the labour ward also hindered men from providing emotional support to their birthing wives in studies conducted in Malawi (Kalulanga, Sundby, Malata & Chirwa, 2011:5) and Ethiopia (Aborigo, Reidpath, Oduro & Allotey, 2011:8). Unfortunately, these are missed opportunities for embracing husbands/ or partner commitment and investing in continued support. In rural Ethiopia, Bedford, Gandhi, Adamssu & Girma (2012:5) report that because relatives were not allowed to accompany a mother into the delivery unit, many mothers felt alone during labour and preferred home deliveries where they had family support.

5.10.1.6 Presence of male midwife

Some community members commented that there were some men who did not want their wives to be delivered by male midwives. The rationale for their mindset was that, two men could not be attending to one woman at the same time. One community member commented,

CM 4: *There are some men who do not want male nurses to deliver their wives.*

CM 1: *Others say if it is a male nurse, there should not be two males attending to one woman. So the husband will not enter the delivery room.*

Presence of male midwife in maternal healthcare is still to be embraced by most rural folks, especially elderly women. The following comment was made to that effect,

CM 6: *Granny (ambuya) mentioned that she saw a male nurse in the labour ward and I told her that these days there are also delivering women.*

The same sentiments expressed in this cycle regarding the presence of male midwives in maternity wards were voiced by postnatal women in Cycle 1. The participants overwhelmingly complained that they were apprehensive when male nurses examined them especially after delivery. Women in a study in Southern Ethiopia reportedly preferred their husbands and relatives to be present at delivery rather than health workers hence they delivered at home (Kea, Tulloch, Datiko, Theobald & Kok, 2018:7). The reason cited for the preference was that the women did not want to expose their bodies to unknown health personnel.

In this cycle, young men in the focus groups reported that it did not matter if their wives were delivered by male nurses. One male community member stated,

CM 3: It *does not matter if a male nurse delivers my wife*.

A probable reason for the inconsistent findings may be because young men are more exposed to the changing world than the elderly men, therefore, they are quick to embrace emerging practices.

Since the results of Cycle 1 and elsewhere in this cycle showed that women who are the users of maternal healthcare services do not want to be attended to by male midwives, policy makers need to consider their views and deploy only female midwives in rural areas. Policy makers should also involve community leaders when deploying midwives in rural settings so that the socio-cultural factors are factored in when making decisions.

5.10.1.7 Inadequate resources

The study revealed a myriad of resources that were in short supply or completely unavailable during the period of the study. The researcher will present human resources shortages followed by food shortages and lastly shortage and unavailability drugs and family planning pills respectively.

Tripathy, Goel and Kumar (2016:1) observe that motivated human resources are key to improvement of healthcare system performance and retention of skilled and qualified health personnel. A midwife in this study inferred that, due to shortage of skilled staff and unavailability of a doctor, care rendered to patients may be delayed.

MHCP 7: *Sometimes there will be shortage of staff. They may be one nurse attending to women. This will take more time before all women are attended to. And sometimes the nurse's level of care might have been reached and cannot offer further care and the care needed by the woman can only be provided by the doctor. The doctor may not be available.*

Consistent with this finding, staff shortage was reported in systematic review studies done by Munabi-Babigumira, Glenton, Lewin, Freiheim and Nabadere (2017:7) in low and middle-income countries that explored views and experiences of different types of skilled birth attendants (. In the studies, heavy workloads reportedly compromised quality of work. To address shortage of skilled health personnel, there may be need for policy makers to train more midwives and to revisit the abolishment of health personnel posts and recruit more midwives. In addition, incentives may need to be put in place to attract skilled personnel to work in rural areas.

Recruitment of more village health workers to compliment the ones in practice was proposed by the participants and to ensure provision of basic health services in the community, especially to women who were not utilising health services due to poor health personnel attitudes. On this respect one participant commented,

CM 3: *If it is possible they should increase the village health workers in the community. If you are not happy with the way you are treated here the village health worker can weigh the baby in the community. Village health worker can weigh the baby even one who has just been born.*

One participant expressed appreciation for the services offered by the village health workers when he stated the following,

CM 8: *They should increase village health workers in the community. They help community members a lot. If you encounter a problem, you go to them and they assist you.*

The appreciation that village health workers receive from the communities they work motivates them to work. The result concurs with a study done by Tripathy, Goel and Kumar (2016:5) in India, where the community acknowledged the community health workers' contribution in improving the general health awareness and practices.

Shortage of drugs at the hospital was also noted to be affecting other patients at the hospital.

PNW 3: *There is no medicine here at the hospital. Because of that some women see no reason why they should come here and they deliver at home.*

CM 8: A*t this hospital there are no drugs. I don't know whether this hospital is different form clinics or not. If you go to Murambwa clinic you pay $2 for consultation and you are given the drugs as well but if you come here you pay $5 and you are told that there are no drugs go and buy.*

The inconsistence in the availability of drugs and sundries in clinics and the hospital may be because some clinics are managed by local authorities and get funding from different sources compared to the mission hospital that is subsidised by the government only. Due to financial challenges the country has been experiencing, the donations from the hospital funders was reportedly to have dwindled. Shortages of resources at health facility could result in failure to provide quality services and ultimately a barrier to utilisation.

Because of unavailability of food at the hospital, participants reported that women did not want to come to hospital early when in labour. These findings are consistent with those from Cycle 1.

CM 4: *There is no food at the hospital. So you ask yourself why should I go early when labour starts?*

Consistent with these findings, women in a study conducted in Malawi by Machira and Palamuleni (2018:30) reported that they did not stay at the mothers' waiting home if they did not have food to eat. Unavailability of food and other sundries at the mothers' waiting home has emerged as a perennial problem in this study and most studies which need urgent attention if the goal to ensure all women who stay far away from health facilities have access to skilled care during delivery.

The other reason cited for women not returning for postnatal visits was the non- issuing of contraceptives at the mission hospital. Because of this problem, participants reported that women end up with unplanned pregnancies.

CM 6: *The other reason why women do not return after delivery is that at the hospital there are no family planning pills and injections.*

MHCP 7: *The problem is that we cannot issue family planning pills here at the hospital. Others cannot walk to Murambwa clinic to get the pills. The pills are not there at the hospital. Some women are having unplanned pregnancies.*

CM 8: *Yes, women are saying that when they return at six weeks they will already be pregnant.*

To address this barrier, the CIG members in Cycle 2 recommended the provision of family planning pills to village health workers for distribution in the communities they reside. Participants made the following recommendations,

CM 8: *Please help the women. Long back we used to have women who distributed pills in the community, where are there now? They should be brought back if they do not want to give women the pills here.*

MHCP 8: *My wish is to issue family planning pills here at the hospital.*

MHCP 2: *Some women forget to take the family planning pills.*

Provision of family planning services is crucial for improving health and slowing population growth. In an analysis of 172 countries Ahmed, Li, Liu and Tsui (2012:120) estimated that the maternal mortality rate could have been averted by 44% if women had used contraceptives. The International Conference on Population and Development (1994:45) emphasises on the basic rights of couples and individuals to decide freely and responsibly the number and spacing of their children. By failing to provide and improve access to contraceptive services, St Michaels Mission Hospital is not only infringing on the individuals' basic rights as enshrined in the sexual and reproductive health rights, but it is also failing to provide comprehensive holistic healthcare. There is need for the Ministry of Health and Child Care to continue engaging with church authorities and community members inorder to reach a consensus that will benefit everyone.

The study highlighted findings on maternal healthcare services related barriers in Cycle 3 as poor health personnel attitudes, long distance to health facility, transport problems and presence of male midwife in maternal health facilities and these were also highlighted in Cycle 1. The findings signify the importance of addressing these barriers and improve women's access to maternal healthcare services.

The study also revealed poor quality of care and health personnel attitude towards indigenous practices, which ultimately affected provision of individualised culture sensitive care. Poor communication skills among some health personnel, which led to insufficient

information given to women on the next review dates leading to non-utilisation of postnatal care services, was also revealed in this study. Based on these findings, hospital authorities should provide ongoing interpersonal skills trainings to maternal healthcare providers to improve the poor image created by poor health personnel attitude.

5.10.2 Maternal healthcare user related barriers

A myriad of barriers encountered by women as they access maternal healthcare services were reported by the participants. Lack of knowledge, fear of HIV testing, attitude, other responsibilities and physical factors were reported in both cycle one and three. Perceived user fees, perceived number of ANC contact visits, age and experience, reluctance to book for ANC, more trust in help provided in the community, fear of staying at the hospital longer during labour and perceptions regarding male midwives were only reported in Cycle 1 and not in this cycle. New maternal healthcare user related barriers that emerged in this cycle were healthcare system use problem based and poverty. Table 5.7 summarises the maternal healthcare user related barriers that were reported in this cycle.

Table 5.7: Maternal healthcare user related barriers

Antenatal	Intrapartum	Postnatal
Lack of knowledge		Lack of knowledge
Fear of HIV testing		
	Fear of reporting abusive treatment	
Attitude (shyness, indifference, stubbornness, complacency, cover for men, procrastination)	Attitude (view birth as a normal process, discourage partner involvement)	Attitude (indifferences, stubbornness, everything is normal)
Health care system use problem base	Health care system use problem base	
Poverty- not able to pay for investigation	Poverty- leading to feelings of shame	Poverty- leading to feelings of shame Poverty- not able to pay for family planning
Physical factors-side effects of drugs	Physical factors-fast labour	Physical factor-pain, discomfort
Other responsibilities		

5.10.2.1 Lack of knowledge

Lack of knowledge was cited as barrier to utilisation of maternal healthcare services before and after the awareness campaign. For instance, information and education about the importance of postnatal care was lacking across all the focus group discussions in this cycle. Participants opined that women do not come back for review after delivery because they did not know they should return.

PNW 2: *Women do not return for review because they do not know why they should come back.*

Although, this comment was only attributed to one participant, this finding shows that there are still some women who are ignorant of the importance of postnatal return visit hence there is need for continued awareness campaigns. Consistent with these findings, Bhattacherjee, Datta, Bikash and Chakraborty (2013:80) noted that in a study in Tea Gardens of Darjeeling, India, majority of women who did not attend antenatal and postnatal review did not know that they were supposed to.

Inability to return for scheduled return visits was reported to be due to illiteracy. Some women could not read the review dates written on their cards because they were illiterate.

PNW 4: *Some women cannot read so they will not come back because they will not know when they are supposed to although the nurse would have written the review date on the card.*

MHCP 3: *The woman may not be able to read what is written on the discharge card. So she will not come because she does not know when she is suppose to come back*.

These findings support the notion that women with low levels of education do not utilise maternal healthcare services. This could be attributed to lack of exposure to health information and financial stability to make necessary decisions in case of obstetric emergencies. Consistent with these findings Larsen, Cheyip, Aynalem, Dinh, Jackson, Ngandu, Chirinda et al (2017:10) reported that mothers with low levels of education in a study in South Africa were less likely to comply with recommendations for early postnatal care. Similarly, studies conducted in Nigeria (Olayinka, Achi, Amos & Chiedu, 2014:13) and Rwanda (Kalisa & Malande, 2016:3) also revealed that the higher the level of education the more likely the women would utilise maternal healthcare services.

Participants strongly complained about midwives asking women questions about immunisation schedules before rendering care to them. Participants reported that women did not like to be shouted at and perceived ignorant when they fail to answer the questions correctly. Because of these practice by midwives, participants reported that women are reluctant to return to hospital for repeat postnatal contact visits.

CM 8: *The other issue that causes women not to come back is that not all women want to be given information. When she comes here at the hospital the chart that will be on the walls indicating the injections that are given to babies is turned over or upside down and*

she is asked to tell them which injection she has come in for. She only knows that she has come with the baby for three days examination. That is what she knows. They ask her the name of the injection she has come in for. If she does not know she will be shouted at. Tomorrow she will not come back. That is the problem.

CM 6: *Women are afraid to come because they do not want to be labelled ignorant when they fail to answer the questions the nurses ask them.*

Women's social circumstances have implications to access to health information and ultimately utilisation of maternal healthcare services. This finding indicates that level of education or literacy determines utilisation of maternal healthcare services. This is consistent with findings from national data surveys in Cambodia and Nepal where Saad-Haddad, DeJong, Terreri, Resttrepo-Mendez, Perin, Vaz, Newby, et al, (2016:7) reported that having a secondary education increased the odds of initiating antenatal care. In contrast, educational background of the mother was not found to be related to timely antenatal care booking in Central Zone, Tigray, Ethiopia (Gidey, Hailu, Nigus, hailu, G/her & Gerensia, 2017:4). Inorder to ensure equitable access to maternal healthcare services, Saad-Haddad, DeJong, Terreri, Resttrepo-Mendez, Perin, Vaz, Newby, et al (2016:14) suggest formulation of programs and policies that focus on women with low levels of education.

5.10.2.2 Maternal healthcare user attitude

Because women view birthing as a normal process, participant reported that they do not come to hospital when they encounter problems. The following sentiments were expressed by one of the participants,

PNW 6: *Most of us we think what we will be feeling it is normal. So, there is no need for us to come to hospital. We will be thinking that everything will eventually be okay.*

These findings are consistent with those in Cycle 1, where participants cited absence of problems as the reason some women had a negative attitude towards utilisation of maternal healthcare services. Similarly, mothers in a study conducted in rural Ethiopia by Bedford, Gandhi, Admassu and Girma (2012:5) reported that a health facility was perceived as a place of an illness and since pregnancy was not an illness, there did not consider delivering in a health facility unless labour was prolonged or complicated.

Consistent with findings in Cycle 1, stubbornness, shyness, laziness and procrastination were cited as the barriers to antenatal care and postnatal care attendance. For example, despite women knowing that their babies should have all the scheduled immunisations they

still did not bring them to hospital/ clinic for immunisation. One community member observed,

CM 7*: Some women do not return to hospital after delivery because they are stubborn. Women are advised to bring the baby to hospital so that the baby can receive all the injections, but they do not come.*

CM 5: *Some women are shy. They do not want others to see that they are poor.*

MHCP 3: *I think they [pregnant women] just procrastinate. They say I will go later. Most of them come and book at five months. That is when you hear that she has gone to book.*

MHCP 5: *I support what she has said about procrastinating. Some women just say a-ah it does not matter. I will go at nine months. When she is delivering she will say I wanted to come to book my pregnancy*.

CM 5: *Some women do not come to book their pregnancies because they are just lazy.*

These attitudes were also mentioned during focus group discussions in cycle 1. The findings in this study are consistent to those in a study conducted in Eastern Cape, South Africa by Alabi, O'Mahony, Wright and Ntsaba (2015:5) in which parturient women waited until advanced stage of labour before going to a health centre. To buttress initiatives that were developed in Cycle 2, health personnel need to specifically create awareness on women's negative attitudes towards utilising available health services.

Women's negative attitudes toward taking iron supplements during pregnancy were attributed to side effects such as nausea and vomiting associated with the supplements, causing women not to adhere to prescribed treatment.

MHCP 4: *The brown pills which women are told to drink cause nausea and vomiting, and women stop drinking them.*

Similar findings were reported by Bhimani, Vachhani and Kartha (2016:258) in India and Pakistan (Nisar, Alam, Aurangzeb & Dibley, 2014:4) where pregnant women did not take the prescribed iron and folic acid because they feared side effects. The study also revealed that some women strongly opposed the presence of their husbands in the labour ward when they were delivering as the following statement revealed.

CM 6: *What do men want in there when we are giving birth? They should go and wait outside.*

The finding resonates with findings from a study in Malawi where Kalulanga, Sundby, Chirwa, Malata and Maluwa (2012:6) reported that women did not want their husband to accompany them to a health facility and they also did not communicate to them about the need for them to be involved. On the other hand, this finding contrasts with the general perception that women need support from their husbands/ partners during delivery. For example, in a study conducted in Nepal by Sapkota, Kobayashi, Kakehashi, Baral and Yoshida (2012:2) results showed that women who gave birth in the presence of their husbands reported higher labour agency scale than women who were supported by other relatives. Since the study revealed that some women do not want their husbands/ partners during delivery, midwives should seek women's opinion before allowing companion in labour.

Maternal healthcare services utilisation is determined by the importance women place in it. The attitudes of the women that are reported in this study provide a foundation for future initiatives targeted at motivating women to utilise maternal healthcare services. One such strategy would be to ensure women realise the available maternal healthcare resources are there to be used by them and highlighting how the negative attitudes lead to poor health outcomes for the mother and the baby.

5.10.2.3 Seek maternal healthcare services when there is a problem

Beliefs about health and illness might have affected utilisation of maternal healthcare services in the district. Before and after implementation of the initiatives, the findings revealed that women visit the hospital or clinic when there is a problem.

PNW 1: *Women come to hospital when they have a problem*

.

PNW 4: *Pregnant women choose to visit the hospital or clinic when they are booking or when they have a problem.*

MHCP 5: *The woman may not come to hospital because she might not have a problem. She will also be alright, so she might say there is no need for her to come back after she has booked. She feels as if everything is alright. The baby will be breast feeding and growing well.*

These findings call for continued awareness on the importance of adhering to scheduled visits regardless of whether one has a problem or not. Using healthcare services when there is a problem was also cited in a study conducted by Bhattacherjee, Datta, Saha and Chakraborty (2013:82) in India, where women said that they delivered at home and would have opted for institutional delivery if they had experienced any complications during

labour. Similarly, women in Southern Ethiopia (Kea, Tulloch, Datiko, Theobald & Kok, 2018:4) reported that they sought care at health facilities only when they were sick or had recognised that they had complications. Such health risk behaviour negatively impacts early detection of problems and timely intervention. Thaddeus and Maine (1994:1092) posit that maternal health risk behaviours are preventive and responsive in nature. For instance, women may delay in taking the necessary action to rectify the problem as evidenced in this study.

5.10.2.4 Poverty

Lack of money to buy food and baby preparation emerged as barrier to utilisation of health facilities especially the mothers waiting home. Most women had financial constraints since they relied on subsistence farming. Women were shy to be seen by other women without food or better items at the mothers' waiting home and they would not come at all or would run away. Village health workers had this to say with regards to women who did not have money to buy food:

MHCP 2*: Sometimes one would not have money. So, if she comes to the hospital she will meet other women who have money and have better things. She will be ashamed if she didn't come with anything. You sometimes hear that a woman ran away and went back home. It will be because she had nothing. The husband has no means of getting money. So, for her to come here early, she will be ashamed to come and see others who will be eating better food while she does not have. So, she may prefer staying at home and come when she is delivering.*

MHCP 4: *Sometimes women do not have enough preparation items for the baby and they are shy to be seen by other women with nothing.*

Because of poverty some women fail to buy family planning pills. A village health worker commented,

MHCP 5*: We do not have money in this community. Some women fail to buy family planning pills because of not having money.*

Financial problems were also noted as a barrier to utilisation of maternal healthcare services in Eastern Cape in South Africa by Tsawe and Susuman (2014:9) and Alabi, O'Mahony, Wright and Ntsaba (2015:4) and in Bangladesh, Cambodia, Cameroon, Nepal, Peru, Senegaland Uganda (Saad-Haddad, DeJong, Terreri, Resttrepo-Mendez, Perin, Vaz, Newby, et al, 2016:7). Similarly, in Nigeria, delivery in a health facility was reported by

Ononokpono and Odimegwu (2014:7) to be higher for women who were in the richest wealth quintile.

5.10.2.5 Physical factors

Afterbirth pains and aches were cited as some of the reasons some women do not return for the scheduled postnatal care in both Cycle 1 and this cycle. The situation is worsened if women must walk long distance while still in pain seeking health care services.

CM 2*: Some women do not come back because their bodies will still be aching and they cannot walk to the hospital.*

PNW 2*: Some women will still be in pain after delivering and they will not return for review.*

The above revelations are a cause of concern as any increase in abdominal pressure of any cause after vaginal delivery for example, coughing, sneezing, jumping or walking can cause urine incontinence (Jundt, Peschers & Kentenich, 2015:565). Home visits or outreach programs by health personnel to monitor both the mother and the baby after delivery were suggested by CIG members and they could also be adopted to prevent women from travelling long distance to a health facility, unfortunately due to shortage of health personnel, the initiative was not pursued.

CM 6*: Sometimes the woman may not be feeling well and then she decides not to come back to hospital because there won't be anyone to hold the baby for her*.

Consistent with this finding Bhattacherjee, Datta, Saha and Chakraborty (2013:81) reported that women in India delivered at home because there was no one to accompany them to the hospital.

Participants also reported that some women do not come with their babies for immunisations because the injections they are given are painful and they do not want to spend the whole night awake attending to a crying baby. However, the village health worker was quick to warn that the women will be exposing their babies to diseases.

MHCP 1: *During the period when babies are given injections, some women may not come because they are afraid the baby will cry at night.*

MHCP 6*: The baby is injected both legs and when changing the diaper, the baby will be crying and then the mother says 'Aaa, I will end up having a sleepless night' So she will not bring the baby to hospital. But one will be exposing the baby to diseases.*

These findings point to a need to continue educating women on the importance of immunisations that are scheduled for their children. The study highlighted gaps in the management of pain in both the women and babies post delivery. Against this background, healthcare providers need to formulate strategies to address the physical factors highlighted in this study.

Although most women would want to deliver at the hospital, some fail to do so because of fast labour and delivery as evidenced by the following comments from the participants.

MHCP 2*: While at home the pregnancy gets painful fast and then she delivers there and then, although she didn't want to deliver at home.*

PNW 7: *…others deliver at home because the labour is so fast and it does not give them time to go to the hospital.*

Fast labour was also cited as the reason women deliver at home or on the way to a health facility in Cycle 1. These findings are a cause of concern as women who experience fast labour may deliver in unclean conditions which will expose them to risk of infection. Moreover, women may have lacerations to the cervix, vagina and perineum and uterine atone leading to postpartum haemorrhage due to fast labour (Suzuki, 2015:150).

Maternal healthcare providers reported that because women take some herbs to speed up labour they experience severe labour pains and the birthing deviates from the normal process resulting in the women delivering fast and without warning.

MHCP 7: *The woman who eventually says she has taken some herbs experiences severe pain. The one who would not have taken anything will have normal labour pain. Yes, the woman will also be in pain but it is not as severe as the pain experienced by the person who would have taken some herbs.*

MHCP 3: *You would have examined the woman and maybe she is a few centimetres dilated. And one would gauge when the delivery would be taking place. But when the woman has taken some herbs, once you turn your back, you see the baby coming out.*

Consistent with these findings, fast labour and delivery was cited as the reason of born before arrival babies in a study conducted in Eastern Cape, South Africa by Alabi, O'Mahony, Wright and Ntsaba (2015:5). Data was not available on the incidence of fast labour in Zimbabwe. Further studies need to be undertaken to ascertain the reason women experience fast labour and delivery.

5.10.2.6 Other responsibilities

Contrary to findings in Cycle 1 where women reportedly did not utilise maternal healthcare services due to other chores at home and absence of an adult to take care of other children, participants in this cycle cited shyness for having had a child too early after delivery as hindrance for some women from coming to book their pregnancies. The evidence to this conclusion was from the following excerpt,

MHCP 6*: Another issue maybe I have another child who is one year and another is eight months and breast feeding. So, can I go and book? No, it is not possible. I will be shy. So, one ends up waiting for labour to start and then go and deliver without booking.*

The finding is in line with findings from a study conducted in Burkina Faso (Dutamo, Assefa & Egata, 2015:4) and Uganda (Morgan, Tetui, Kananura, Ekirapa-Kiracho & George 2017:v16) where work overload was cited as the reason for not attending ANC. Similarily, women in Sudan cited increase in domestic chores during planting, weeding and harvesting seasons as the reason they could not attend scheduled visits (Wilunda, Scanagatta, Putoto, Montalbetti, Segafredo, Takahashi, Mizerero & Betran, 2017:5).

These findings suggest that efforts need to be strengthened in exploring other alternatives to ensure women have access to contraceptives, to avoid short spaced pregnancies which lead to poor health outcomes to the mother and the children. The following are new sub-themes that emerged in Cycle 3 under maternal healthcare user barriers.

5.10.2.7 Fear of reporting abusive treatment

The participants commented that, although women knew that they were supposed to report any abusive treatment, they received from nurses, they were reluctant to report because they were afraid that the next time they would come to hospital they would be treated worse.

MHCP 1: *Yes, there are some suggestion boxes at the hospital. But people do not report because they are afraid that when they come back next time they will get worse treatment than before.*

MHCP 2: *Yes, if one reports and comes back, it will not work out well.*

MHCP 8: T*he staff will fix me to proper size next time I return if I had reported them.*

MHCP 1*: You may go and report to the matron, but you realise that the matron and the nurse who treated you badly are friends. You do not have power since they are working*

together, for the matron to reprimand her colleague, it's not possible. So, the issue may die like that, but you may have been hit or your baby has been killed.

These findings provide new insight to hospital management to devote resources and time in engaging community members in devising strategies to address patients' grievances. The development of a check-list in this study by the CIG members for continued monitoring and evaluation of the quality of care provided to women, is hoped will address poor health personnel attitudes and conduct.

5.10.2.8 Fear of HIV testing

Fear of HIV testing was deemed by participants as a reason for women not going to hospital.

CM 1: *Some women do not go to hospital or clinic because they are afraid of being tested for HIV.*

MHCP 3*: Yes, women do not want to be tested.*

Fear of HIV testing was also cited as the reason why pregnant women do not utilise maternal healthcare services in Cycle 1, rural Kenya (Turan, Bukusi, Onono, Holzemer, Miller & Cohen, 2010:111) and Malawi (Machira & Pulamuleni, 2018;25). The common reasons cited in the Kenya study for the refusal were fear of rejection by family and anticipated break-up of their relationship with their male partners. The results suggest that fear of HIV testing can be a barrier to PMTCT programs even in an environment where HIV testing in pregnancy is high.

The study highlighted findings on maternal healthcare user related barriers that emerged in Cycle 3. The individual barriers were lack of knowledge, poverty, attitude, physical factors, fear of HIV testing, other responsibilities, hospital use based on problem and assertiveness to report abusive treatment. These findings suggest continued client education on their role in promoting a positive birth outcome. Furthermore, the findings also suggest that women should receive adequate and continuous information on the importance of return visits. The awareness campaign that was undertaken in Cycle 2 by CIG members to educate women on the importance of return visits needs to be intensified at a larger scale.

5.10.3 Support system related barriers

Perceived lack of partner and community support and involvement during pregnancy and delivery were cited by participants in both Cycle 1 and this cycle as barriers to utilisation of maternal healthcare services. In Cycle 1, participants also reported that husbands/ partners refuse HIV testing and absence of husband/ partner at home were barrier to utilisation of

maternal healthcare services while in this cycle participants reported that husbands/ partners were afraid of HIV testing. These revelations are a cause for concern as they lead to non- uptake of PMTCT for HIV testing programs, leading to poor birth outcomes for both the mother and the baby. New support system barrier that emerged in this cycle was perceived fear of women's behaviour in labour. A summary of support system related barriers cited in this cycle are shown in Table 5.8 followed by a discussion of these barriers.

Table 5.8: Support system related barriers

Antenatal	Intrapartum	Postnatal
Lack of partner support and involvement	Lack of partner support and involvement	
Partner afraid of HIV testing		
	Perceived fear of women's anger	
	Lack of community support	

5.10.3.1 Lack of partner support and involvement

Male participants reported that their wives did not want to come with them to clinic despite their willingness to do so. Women were reported to employ delaying tactics to discourage men. One community member complained,

CM 3: *Our wives do not want us to come with them to clinics. You tell them that you want to come with them but the following day your notice your clothes have not been washed. They should plan.*

These findings mirror Nyondo, Chimwaza and Muula's findings (2014:5) in Malawi, where some pregnant women in Malawi reportedly did not want their husbands to accompany them to a health facility because they would be embarrassed.

Some women reportedly covered up for their husbands when they are asked by nurses why they did not accompany them to hospital. One postnatal woman opined,

PNW 7: *The problem is also with us women. If we are asked where our husband is we lie to the nurses. We say he works far away. That is the problem.*

Traditions passed from one generation to another had an influence on decisions made regarding men involvement in maternal care as observed by one of the participants,

CM *7: We grew up being told that men should not be there when his wife is delivering.*

Gender norms and belief systems dictate appropriate behaviour for men and women and may affect roles, rights and obligations over the life course (Horstman, 2004:1). For example, men in Malawi reportedly never sought maternal services with their wives as they claimed pregnancy related issues were women's issues (Machira & Palamuleni, 2018:28). While in rural Rwanda, women opposed male partner presence during delivery as the practice was against their culture (Kalisa & Malande, 2016:2). Consistent with these findings Sapkota, Kobayashi, Kakehashi, Baral & Yoshida (2012:2) note that husbands' presence in delivery room in Nepal is culturally discouraged because of the belief that their presence worsens labour pains and prolong labour. Tales that are shared in the community frighten men from offering support to their wives when they are in labour. For instance, one community member commented that a woman chewed her husband's fingers off when the pain was severe.

CM 4: Yes, *he should not be there when I am delivering. He should not get in. I was told that some time ago a man went in the delivery room with his wife and whenever the wife was in pain she would bite his finger and it was bitten off.*

To encourage partner involvement participants suggested that women who do not come with their husband should not be served.

PNW 7: *At the hospital they should say a woman who comes alone without her husband will not be booked.*

In contrast with findings in Cycle 1 before implementation of the initiatives where husbands/partners reportedly refused to be actively involved in maternal health issues, some male participants after the implementation of the initiatives expressed interest in supporting their wives.

CM 8: *Some of us we want to come with our pregnant wives to hospital.*

CM 3: *We do not refuse to come together with our wives. We even want to be in the labour ward with them.*

This finding has strong implications for maternity practice at St. Michaels Mission Hospital where companions in labour were reportedly not encouraged by some women and maternal healthcare providers because facilities lacked privacy. In such context, the hospital management should create conducive environment for the presence of husbands. The interest shown by some men need to be encouraged and promoted. These men can be used as role models in sharing their experiences with other men and to dispel any myths

and misconceptions. Opportunities that have men engaging with maternal healthcare providers need to be seized. The findings emphasise on improving men education.

The findings resonate with those from a study in Malawi where Kululanga, Sundby, Malata and Chirwa (2011:4) reported that some men, whose wives had conceived after a long waiting time, who viewed the pregnant as precious and were anxious of the well being of the foetus and the wife, participated in maternal health care. Similarliry, in Mwanza Region, Tanzania, Elias, Mmbaga, Mohamed and Kishimba (2017:3) reported that willingness of a mother to be escorted to ANC influenced partner involvement.

Women participants were surprised by the declaration that men were interested in participating in maternal health issues. The following statements indicate the extent of their surprise,

CM 7: *Is that so? We thought men did not want to come to clinic with us.*

CM 6: *Yes, that is what we thought.*

The participants suggested that men need to be given the same health information provided to women to ensure they remind each other what needs to be done to ensure a positive outcome.

MHCP 5: *I think once the woman is pregnant, the man should be given in-depth information. Men should know when their wives are supposed to go to hospital for review and they should go together. If possible, the husband should accompany his wife so that he can also remind her of what was said. He should also know the review dates.*

CM 2: *Men should come to hospital together with their wives.*

In a paternalistic set up, men's decisions influence utilisation of maternal healthcare services. Hence participation of men in maternal healthcare is imperative. Health personnel need to capitalise on the interest shown by some males in the community and use them to sensitise other men. Previous initiatives like father support groups in Ghana (Aborigo, Reidpath, Oduro & Allotey, 2018:7), where men shared knowledge and encourage young fathers to be actively involved in maternal health issues, resonate well with the findings suggested in this study.

Involving husbands/or partners in maternal health issues has been highlighted in this section as enablers to utilisation of maternal healthcare services. Young men who are growing up could benefit from targeted health campaigns so that as they transition into

adulthood, they would view support of their partners as part and parcel of their everyday life as envisioned by Aborigo, Reidpath, Oduro and Allotey (2018:7).

This finding resonates with that from a study conducted in rural Rwanda by Kalisa and Malande (2016:3), where there was a policy that women who were not accompanied by their husbands were not booked for ANC. Such a policy is controversial because of the cultural beliefs that condone men's non-involvement in maternal health issues. Few women will utilise the available resources if the policy is adhered to, as evidenced in the same study, where ANC attendance was low. Moreover, it is unprofessional to withdraw services because of absence of partners. To encourage partner involvement, there is need to continue creating awareness on why men need to be involved and to provide conducive environments for men to express themselves.

5.10.3.2 Partner afraid of HIV testing

The participants reported that some men refused to have an HIV test and when the wife is tested, and the results are negative their partners will claim that the wife's results are also their results even if they haven't been tested. The rationale given for that mindset is that, they sleep together and eat the same food so how can the results be different.

PNW 2: *Sometimes a woman is tested, and the results are negative, and the husband refuses to be tested saying your results are also mine*.

MHCP 6: *Women do not come to hospital because the husband will be refusing to be tested.*

CM 2: *Another issue that is a problem is that men do not want to come to hospital. They say your results are also my results. Is it not that we sleep together, and we eat the same food?*

Consistent with these findings, Nyondo, Chimwaza and Muula (2014:5) report that because of fear of HIV testing, some men in Malawi regarded their wives' results as a proxy for them.

Fear of rejection by their husband after receiving positive HIV results caused some women not to come to the hospital. Those who knew the implications of not having the test done eventually forced themselves to come.

MHCP 3: *He will tell you that your results are also my results. If he comes and get tested, he may be told that he is positive, and he will get worried. Sometimes the husband will reject her. There are many issues that may cause them not to come. Sometimes if you*

come here your way of living completely changes. That is why women delay in coming but because of the situation one would eventually be forced to come and book.

Turan, Bukusi, Onono, Holzemer, Miller and Cohen (2011: 1112) posit that, because the pregnant woman is the first family member to be tested for HIV, she may be blamed for bringing HIV in the family. Some women end up refusing to get tested or opt out of antenatal care services completely. Every woman who refuses to get tested represents missed opportunities for PMTCT programs and promotion of maternal and child health (Turan, Bukusi, Ohono, Holzemer, Miller & Cohen, 2010:1118).

To encourage men to be tested for HIV, participants suggested counselling for men on importance of knowing their HIV status, especially those men who refuse to be tested and base their status on their wives' results.

PNW 7: *Men need to be counselled so that they know the importance of knowing their HIV status.*

PNW 2: *ehe, they need to be told that my HIV status is mine not his.*

CM 1*: They should also be told that their wives' results are not theirs. They should also be tested because one partner may be positive and the other is not. It can happen that way.*

PNW 8: *But maybe this man will be HIV positive. When they sleep together he may infect the wife, and this will affect the baby in the womb*.

The findings in this study point to a need to continue engaging men in sexual and reproductive health issues so that they see the need and importance of the programs.

5.10.3.3 Perceived fear of women's anger

Although community members acknowledged the importance of spousal support in labour, perceived physical violence women reportedly exhibit discouraged men.

CM 8: *It is good to be supportive to our wives, but we heard that when women are in labour they have a lot of temper.*

CM 4: Most *of the temper will be directed towards the husband and not at the nurse.*

Perceptions regarding women's behaviour during pregnancy and labour were also expressed by some men in a study conducted in Malawi by Nyondo, Chimwanza and Muula (2014:6). The authors reported that some men reported that mood swings, demands and

attitudes displayed by women when pregnant may cause men not to be involved. The findings of this study have shown that lack of spousal support due to cultural beliefs and traditions hinders male partner engagement and involvement in maternal healthcare issue. This is because traditionally, maternal health issues have been predominantly the domain of women (Kululangu, Sundby, Mulaita & Chirwa, 2011:1). Zamawe, Banda and Dube (2015:1) affirmed that perceptions, beliefs and attitudes towards maternal health as a woman's activity contribute to poor men's involvement in reproductive health.

The use of posters and information sharing and dissemination campaigns that was embarked on by CIG members promoted men engagement and participation in maternal healthcare issues. The strategy that was suggested by participants in this study of increasing male village health workers in the community to woo men in maternal health issues might need to be pursued too, as another possible option. Other strategies to encourage men involvement in maternal health issues that were used elsewhere include workplace-based workshops and seminars and use of incentives and invitation cards sent to men (Zamawe, Banda & Dube, 2015:2).

5.10.3.4 Lack of community support

Some village health workers reported that some members of the community discourage other members from embracing health messages disseminated by community health workers.

MHCP 2: *In my own village, I have one individual whom I have problems with. When I encourage people to come to hospital, the person goes behind where I had covered telling community members not to come.*

Lu, Tang, Lei, Zhang, Lin and Ding (2015:1) posit that health education may improve clients' knowledge leading to health seeking behaviour modification. Therefore, these practices exhibited by some community members derail the efforts of community-based heath workers.

The major community related barriers that persisted in both Cycles 1 and 3 are lack of community involvement and support. This has hampered progress of some of the health-related programs that have been initiated in the community.

5.10.4 Culture related barriers

In Zimbabwe, culture values and norms are important concepts that influence people's health seeking behaviours. Culture related barriers that were cited during focus group discussions in both Cycles 1 and 3 were use of herbs and cultural beliefs and norms. New cultural barriers that emerged from the focus group discussions in this cycle were fear of

witch-craft and sanctioning of cultural norms. Table 5.9 summarises the cultural barriers that were reported by participants in this cycle.

Table 5.9: Culture related barriers

Antenatal	Intrapartum	Postnatal
Use of herbs	Use of herbs	
Cultural beliefs and norms (pregnancy must be concealed during the first few months)		
Fear of witchcraft	Fear of witchcraft	Fear of witchcraft
Sanctioning of cultural norms		

5.10.4.1 Use of herbs

Before and after implementation of the awareness campaign on the importance of utilising maternal healthcare services, participants reported that most women do not utilise antenatal care services from health facilities because they will be using herbs provided in the community. A participant revealed that some women come to hospital after experiencing problems following use of herbs.

MHCP 2: *They come here after they have already taken herbs. Most women come here when they notice there is a problem*

The researcher could not establish the nature of the problems that the women encountered after taking the herbs but the most common adverse effects to use of herbs in pregnancy reported in a study done by Mureyi, Monera and Maponga (2012:3) were post partum haemorrhage, retained placenta, breech birth, prolonged labour and erratic postnatal bleeding.

One of the participants reported that elderly women in the community were preferred by women because they provided them with herbs.

PNW 1: *Other women prefer the elderly women in the community because they give them herbs to open the birth canal (mushonga wemasuwo).*

Preference for elderly women in the community for the provision of herbs in childbirth was also cited in Cycle 1. The findings in this study show that herbal medicine continues to be part of the Mhondoro Ngezi community. Integration of indigenous knowledge system with modern medicine could be the way forward. Use of herbs by pregnant women to widen the birth canal was also reported in a study done by Mureyi, Monera and Maponga (2012:1) in urban Harare, Zimbabwe. Further research is needed to ascertain the active properties in these herbs.

5.10.4.2 Cultural beliefs and norms

Consistent with findings in Cycle 1 where use of maternal healthcare services during the first trimester was hindered by fear of disclosing one's pregnancy early, participants in this cycle reported that women in Mhondoro-Ngezi hide their pregnancies for fear of being bewitched. The following excerpts highlight the cultural beliefs and norms that women are supposed to follow.

PNW 4: *When a woman in this area gets pregnant she only tells her husband and no one else.*

In contrast with findings from Cycle 1, where use of maternal healthcare services during the first trimester was hindered by fear of disclosing one's pregnancy, in this cycle, some participants reported that although pregnancy was surrounded with secrecy that did not stop women from booking early. One postnatal woman revealed,

PNW 2: Yes, *the pregnancy is kept secret from all other people, but this does not prevent a woman to go and book early. She goes.*

Cultural beliefs and norms influence an individual's decision to utilise the existing maternal healthcare services. Hence understanding these beliefs and norms assist health personnel in formulating interventions that do not clash with women's beliefs. Tsawe and Susuman (2014:9) observed that culture influences the way people live and their belief systems. The belief that women should conceal their pregnancy delayed pregnant women from seeking ANC services early in a rural community in eThekwini district in KwaZulu-Natal (Sibiya, Ngxongo & Bhengu, 2018:3) and in Malawi (Machira & Palamuleni, 2018:28). In these studies women started using antenatal services at six months, which was late for early detection of at-risk women.

5.10.4.3 Fear of witchcraft

Some participants inferred that women disclose their pregnancies to their husbands only because they are afraid that they may be bewitched and abort or miscarry if they tell other people. This was expressed by one participant who stated the following:

PNW 4*: When a woman in this area gets pregnant she only tells her husband and no one else. This is because of fear of being bewitched and may abort or miscarry if she tells other people.*

MHCP 5: *Women believe that there is witchcraft and that is why they take the herbs.*

These findings are consistent from those in Cycle 1, where women were reported to hide their pregnancies until the pregnancies were visible, for fear of losing the baby from witchcraft. Provision of birth preparedness booklets in the community is hoped would encourage women to critique their views and perceptions after reading it and adopt positive health seeking behaviours. These findings are consistent with those from a study in Southern Ethiopia where women delayed booking their pregnancies during the early stages for fear of witchcraft (Kea, Tulloch, Datiko, Theobald & Kok, 2018:6).

5.10.4.4 Sanctioning by cultural norms

The study revealed that men were prohibited from having sexual intercourse with their wives during pregnancy. The explanation given in Cycle 1 for the cultural norm is that once the woman starts taking herbs to open the birth canal if she engages in any sexual intercourse the herbs will not work.

MHCP 2: *Other people say once you start using the herbs, you should not engage in sexual encounter with a man because if you have intercourse with a man the herbs will not work. So, it is expected that when you are due to deliver you should not have intercourse.*

The above finding could be the reason why some women go back to their family home when they are pregnant and come back after delivery. Cultural norms that prohibit men from having sexual intercourse with their wives during pregnancy were also reported in Cycle 1. The above cultural norm was condemned in this study as it exposes families to HIV. Some men may engage in extra-marital affairs during the sanctioned period. In Bangladesh, still births were attributed to having sexual intercourse during pregnancy (Aktar, 2012:65).

5.10.5 Religious related barriers

Some religious groups in Mhondoro-Ngezi district did not allow their members to use health facility but instead drank holy water and women were not allowed to use contraceptives. Fear of mystic forces was cited in Cycle 1 and not in this cycle as a religious barrier related to utilisation of maternal healthcare services. Both Cycle 1 and this cycle cited religious healing practices as religious related barriers to utilisation of maternal healthcare services. In this cycle, a new religious related barrier that emerged was religious teaching and doctrine. Table 5.10 summarises the religious related barriers that were cited in this cycle.

Table 5.10: Religious related barriers

Antenatal	Intrapartum	Postnatal
Religious healing practices	Church doctrine (not allowed to use hospitals)	Church doctrine (not allowed to visit clinics, no

		family planning at mission hospital)

5.10.5.1 Religious healing practices

The study findings on religious practices have been consistent before and after implementation of the awareness campaign on the importance of utilising maternal healthcare services. The study findings have shown that religion affect utilisation of maternal healthcare services in the district.

The Apostolic sects were reported to have their own shelters where they assist each other to deliver women in labour. Participants shed light on the provision of maternal health services by the church members and said,

PNW 1: *Women who belong to some Apostolic sect are not allowed to come to hospital. They deliver each other at their shelters there*.

PNW 3: *They do not come here [hospital]*

When the researcher asked the participants if the Apostolic groups that do not allow their members to use health facility resided in the district they overwhelmingly said they were from the nearby districts.

PNW 4: *The apostolic sects are from Bonanza near Murambwa clinic, in Seke district.*

Some women who marry into the Apostolic sects that restrict its members from seeking healthcare services prefer to deliver at their family homes, where there are no restrictions and return to their husbands after delivery. One participant stated,

CM 8: *In some cases, the woman may take a risk in coming to the hospital. And for her to take a risk again and continue going to the clinic with the baby it is a problem. In some circumstances most women prefer to go and deliver at their matrimonial homes where they have no restrictions on using health facilities. There, her family may not belong to the Apostolic sect. When she goes back to her in-laws after delivery, she will not be able to continue coming with the baby to the clinic, she will not be allowed by her husband.*

Religious maternal healthcare providers are reported in literature that they believe that good delivery outcomes are derived from divine/supernatural involvement (Ugwu & de Kok, 2015:4). It is this belief that convinces church members to seek services at their shelters.

Embracing different religious beliefs and norms might enable utilisation of maternal healthcare services by different religious groups. It is therefore, imperative for the hospital/clinic authorities to engage Apostolic religious leaders to craft way forward on possibilities of integrated health services provision. Since the study indicated that there is an Association of Apostolic Churches, the policy makers could engage them.

5.10.5.2. Church doctrine

The study findings revealed that some Apostolic groups allowed their members to use health facilities while others did not.

MHCP 2: *On issues to do with religion, some [churches] do not allow their members to go to hospital while others allow people to go to. That is what I see happening.*

PNW 3: *Some believe in their doctrine. Because when they go to their churches to seek assistance they are told that if the woman goes to hospital with the baby it will die.*

Even though Apostolic sect members know about health promotion programs that are in place, participants reported that they cannot use them because of their church teachings and doctrines.

MHCP 2: *Most Apostolic members know about the health programs in the community but because of their doctrines that do not accept any other interventions. They do not use them.*

PNW 6*: At St. Michaels Mission Hospital they do not give us family planning pills.*

PNW 5: *Something needs to be done. They say they cannot give family planning here because of their church doctrine but not all people in the community belong to their church.*

Other studies have also cited religion as a barrier to utilisation of maternal healthcare services. For instance, participants in a study in northern Uganda reported that a provider with religious conviction never issued any method of family planning (Orach, Otim, Aporoman, Amone, Okello, Odongkara & Komakech, 2015:6).

Barriers that affect utilisation of maternal healthcare services in Mhondoro-Ngezi district were discussed. Some of the barriers that were raised before the situation analysis still exist and some changes have taken place, and these include negative health personnel attitudes and conduct, poor quality of care, shortage of resources at health facility, fear of HIV testing, negative patients' attitude, fear of witchcraft, religious teachings and doctrines and lack of partner and community support.

5.11 Enablers to utilisation of available resources and maternal healthcare services

Enablers to use of available resources and maternal healthcare services utilisation after the implementation of the developed initiatives were maternal healthcare system related, support system related, community related and culture related. Maternal healthcare user related enablers and religious related enablers sub-themes did not emerge in this cycle even though there were cited in Cycle 1 hence there were not discussed in this cycle. Table 5.11 shows a summary of the enablers and the sub-themes.

Table 5.11: Enablers to utilisation of available resources and maternal healthcare services in Mhondoro-Ngezi district

Enablers	Antenatal	Intrapartum	Postnatal
Healthcare system related	Healthcare services offered (Screening, examination, testing and provision of drugs)	Healthcare services offered	
	Provision of health information	Provision of health information	Provision of health information
		Pain control and prevention of complications	
Community related		Decline in traditional birth attendants	

5.11.1 Healthcare system related enablers

Sub-themes to maternal healthcare system related enablers that emerged from both Cycle 1 and this cycle were presence of village health workers, healthcare services offered and provision of health information. Provision of incentives, provision of transport, availability of skilled birth attendants, extended hospital stay after delivery and issuing of birth records were mentioned in Cycle 1 and not in this cycle. New enablers that emerged in this cycle were positive health personnel attitude, pain control during delivery, cut in waiting time and encouragement of partner involvement. Table 5.12 shows the maternal healthcare enablers.

Table 5.12: Healthcare system related enablers

Antenatal	Intrapartum	Postnatal
Healthcare services offered (Screening, examination, testing and provision of drugs)	Healthcare services offered	
	Pain control and prevention of complications	
Provision of health information		

5.11.1.1 Healthcare services offered

Provision of screening and health assessment services at the hospital attracted women to use hospitals.

MHCP 2: *Most of us use hospitals because now they are screening for diseases, like sexually transmitted infections. When you come for scale [ANC] they [nurses] also examine you.*

One village health worker noted the difference in the provision of care after the implementation of the initiatives at the hospital. Women were now examined thoroughly, and patients returned because they are impressed with the care rendered.

MHCP 5: *They used not to do it but now when you go to the hospital they now examine you. They examine your nails and eyes to check if you have enough blood. They ask you to open your mouth. They also examine you even on the private parts, checking if you have any sores or any other problems. So I see as if people are now coming because they are examined.*

Participants in this study also reasoned that women who booked for antenatal care received better care when seeking health services at a health facility.

PNW 1: *If you book early you will get help early.*

PNW 8: *You book early so that nurses will treat you better.*

The findings demonstrate that the quality of care offered after the implementation of the check-list to monitor health personnel's interaction with women changed. These positive behaviours need to be reinforced with continued close monitoring and supervision. Previous studies have demonstrated that provision of quality care may enhance utilisation of health services.

5.11.1.2 Pain control and prevention of complications

Management of pain and prevention of complications during labour was reported by participants as one of the reasons women preferred to be delivered by nurses at health facilities.

MHCP 3: *Women prefer to be delivered by nurses. If a woman is delivering in hospital she will not experience much pain. Women also say that at the hospital they are monitored and if there are any problems they will be assisted.*

The finding is consistent with a study in Zambia where women cited provision of pain relief in labour as the reason they preferred institutional deliveries (Phiri, Fylkesnes, Ruano & Moland, 2014:6).

5.11.1.3 Provision of health information

Provision of health information by healthcare providers was reported to be the reason women preferred nurses over help provided in the community.

MHCP 3: *Women prefer nurses because they give them information.*

PNW 6: *Village health worker should continue encouraging women to go for scale [ANC].*

MHCP 2: *Nurses only see an individual coming to book. It is the village health worker who encourages the women to come and book. We visit households and talk to people about health issues.*

MHCP 5: *In our communities we take advantage of the meetings that will be taking place.*

Consistent with these findings, women in Nicaragua reported receiving health information on the importance of utilising mothers' waiting homes (casa materna) from health workers and community members (Lubbock & Stephenson, 2013:80). Since village health workers are recruited from their communities and are aware of the social and cultural norms of the communities, they can interact with community members well and community members are free to ask questions if they wanted clarification on some information.

5.11.2 Community related enablers

Decline of traditional birth attendants emerged as community related enabler (Table 5.13).

Table 5.13: Community related enablers

Antenatal	Intrapartum	Postnatal
	Decline in traditional birth attendants	

5.11.2.1 Decline in traditional birth attendants

Participants reported that the decline in traditional birth attendants and reluctance by known traditional birth attendances to assist women in labour due to fear of contracting HIV force women to seek services at health facilities.

MHCP 2: *Even those elderly women who were called traditional birth attendants are no longer there in the community because they are now afraid of being infected during*

delivery. So they are no longer offering the service. With this disease that is there, I may deliver an individual who is infected and end up with the disease because I will not have enough protective stuff.

The study findings demonstrate a paradigm shift in providers of maternal health. While in the 1970s international organizations advocated for community-based care, including provision of antenatal care and training of TBAs, the 1990s saw focus shifting to skilled institutional care (Choguya, 2015:4). The finding in this study shows that the existing efforts in encouraging institutional deliveries are successful. Healthcare personnel should capitalise on every opportunity to disseminate information on the importance of institutional maternal health care to reinforce the positive behaviour.

5.12 Beliefs, practices and taboos

This section will detail the cultural and religious beliefs, practices and taboos the participants highlighted after the implementation of the developed initiatives. Table 5.14 summarises the cultural and religious beliefs, practices and taboos reported in Cycle 3.

Table 5.14: Beliefs, practices and taboos

	Antenatal	**Intrapartum**	**Postnatal**
Cultural	Use of herbs to prepare for birth	Use of herbs to prepare for birth	
		Other indigenous practices to speed up labour	
	Indigenous practices to prevent complications for mother and baby		Indigenous practices to prevent complications for mother and baby
	Cultural taboos and underlying beliefs		
Religious	Use of holy objects and fluids	Use of holy objects and fluids	Use of holy objects and fluids
	Practices to stretch the perineum		

5.12.1 Cultural beliefs, practices and taboos

Practices that were reported to prevent anaemia in pregnancy were reported in Cycle 1 and not in this cycle and therefore, they will not be covered here. Use of herbs to prepare for birth, indigenous practices to prevent complications to mother and baby and to speed up labour were reported in both Cycle 1 and this cycle hence they will be discussed next. Table 5.15 summarises the cultural beliefs, practices and taboos reported by participants in this cycle.

Table 5.15: Cultural beliefs, practices and taboos

Antenatal	Intrapartum	Postnatal
Use of herbs to prepare for birth	Use of herbs to prepare for birth	
	Other indigenous practices to speed up labour	
Indigenous practices to prevent complications for mother and baby		Indigenous practices to prevent complications for mother and baby
Cultural taboos and underlying beliefs		

5.12.1.1 Use of herbs to prepare for birth

The study findings revealed that women use herbs and indigenous practices in pregnancy and childbirth with different herbs used for different purposes. The following sentiments were expressed by the participants in this cycle on the use of herbs.

PNW 3: *Women still use mushonga wechibhoi (African medicine) to stabilise pregnancy.*

MHCP 6: *We grew up being told that when you are a daughter in-law once you get pregnant, you are given some traditional medicine to open the birth canal so that the baby will come out without any problems.*

MHCP 6*: The reason why we drink mushonga wechibhoi (the African medicine) is because sometimes someone would have tied your pregnancy inorder for you not to deliver, so one will be trying to untie it inorder for you to deliver safely. It is not that it makes you deliver, but it will be untying your pregnancy from anyone who would have bewitched you.*

Contrary to these findings, a study done in urban Harare by Mureyi, Monera and Maponga (2012:3) reported that women use herbs during pregnancy to prevent perineal tears.

CM 1*: We give pregnant women herbs to open the baby's route so that they will not have difficulties during delivery*

PNW 6*: There are some practices that are done culturally. For example, using traditional medicine called rukato (Asparagus africanus) to open the birth canal.*

MHCP 5: *Some drink water mixed with tsvina yetsuro (hare droppings). They say because the hare suddenly gets up as if it has been startled and they reckon that the same happens when you drink the water mixed with the droppings. Labour pains will be sudden, and the delivery will be fast. The droppings are taken from the spot where the hare was lying down.*

PNW 8: *Yes, pregnant women also drink water mixed with imba yezingizi (a carpenter bee's nest) or ivhu renhuta (soil burrowed by mole).*

MHCP 1: *There are also some herbs that women pick from the forest, such as green leaves called muredzo (Dicerocaryum senecioides).*

MHCP 8: *Women also use ndove (cow dung). They say you mix with water and drink the mixture.*

Use of elephant dung and soil burrowed by mole were also reported in a study done in Harare, Zimbabwe (Mureyi, Monera & Maponga, 2012:3). In Ghana, women are given a variety of artefacts to lessen pain or enhance delivery. For example, Aziato and Omenyo (2018:5-6) report that traditional birth attendants in their study mentioned giving pregnant women milk that is prayed for when labour was prolonged, fresh ground okra to treat slippery vaginal discharge, Ada salt to enhance easy delivery and cassava leaves to heal sick pregnant women.

New herbs from the ones mentioned in Cycle 1 emerged in this cycle and the herbs have dual purposes. For example, women use the herbs as tea and to prepare the birth canal for easy delivery.

PNW 1: *Other women use mashiza ezumbani (Lippia javanica leaves). They boil and drink like tea.*

MHCP 2: *Other women use mashizha embambaira (sweet potatoes leaves). They drink the water.*

CM 7*: We no longer give women herbs these days during pregnancy because of HIV infection. Women should not use herbs because once they start using herbs they are not supposed to have sexual intercourse with their husbands and this may lead to their husbands looking for other women and contracting HIV infection*.

CM 8*: No*, *herbs are still used in pregnancy. Yesterday, my wife and I met an elderly woman who asked me whether I knew that my wife should use herbs for opening the birth canal. And I said no. She asked me if I wanted the herbs. And I said yes. But I did not manage to get the herbs because the bus we were waiting for had come and we left.*

The common thread emerging in both Cycles 1 and 3 is that, women do not want prolonged labour, hence they use herbs to speed up delivery. This revelation calls for maternal health care providers to educate women on the birthing process so that women understand the

deviation from the normal and detest from inducing precipitate labour that leads to negative birth outcomes.

Use of traditional medicine during childbirth has been reported in studies done in South Africa (Alabi, O'Mahony, Wright & Ntsaba, 2015:4) and Ghana (Aziato & Omenyo,2018:5). The common thread between these studies is that women resort to anything to ensure they deliver safely. It is therefore, imperative for maternal healthcare providers to support them by undertaking research to ascertain beneficial and detrimental traditional medicine.

5.12.1.2 Other indigenous practices to speed up labour

Use of elephant dung to speed up delivery has been reported in both cycles. In this cycle participants also reported that women use sweet potatoes leaves to speed up labour.

MHCP 2: …*They say once you drink water with sweet potatoes leaves the baby does not take time before it comes out…They drink so that labour is speeded up.*

Use of herbs to speed up delivery has been reported in chapters 3 and 4. Consistent with these findings, women in a study conducted by Alabi, O'Mahony, Wright and Ntsaba (2015:4) in Eastern Cape, South Africa, reported using baboon's urine to speed up delivery. The study demonstrates the significance women place in these herbs, hence there is need for integration of indigenous knowledge systems into the medical maternal health model. Through integration, the indigenous knowledge practices would be refined, documented and contribute to the existing body of maternal health.

5.12.1.3 Indigenous practices to prevent complications to mother and baby

Participants also revealed that women are instructed to start using the herbs from end of second trimester into third trimester until delivery and drinking as much as possible.

MHCP* 1: They are some herbs that are used which we hear people talking about. Most of the time pregnant women start using these herbs when they are 5 or 6 months pregnant.*

CM 1: *We give them herbs to open the baby's way so that they will not have difficulties during delivery.*

Different practices have been reported elsewhere. For example, to prevent the placenta from disappearing in the birthing woman's body, traditional birth attendants in Ethiopia reportedly tied a cloth around the woman's waist (Warren, 2010:102). Inconsistent with these findings, a study conducted in Harare surburbs by Mureyi, Monera and Maponga (2012:3) reported that herbal use during pregnancy was initiated at the onset of the third

trimester. However, consistent with findings from this study, the same study reported that the dose and frequency was not standardised.

The participants shared the different types of herbs commonly used in Mhondoro-Ngezi district and their purposes. For example, consistent with findings in Cycle 1, participants in this cycle mentioned that some women drink *Asparagus africanus* to open the birth canal.

5.12.1.4 Cultural taboos and underlying beliefs

Participants reported culture-related myths and rules women were supposed to follow to ensure a positive outcome. Even though some women were sceptical about the efficacy of the herbs, participants reported that they are forced to drink because of fear of negative outcomes. One of the maternal healthcare providers shared some of the myths that she was forced to follow when she was pregnant,

MHCP 3: *You are not allowed to stand by the door step, because the baby will get stuck in the birth canal during delivery. If you eat leftover food, you are told that you will pass stool during delivery. If you sit at the door step, the baby will be stuck on the birth canal entrance. You are forbidden to walk backwards. There are too many rules that we should adhere to. When the elders are there we follow the rules. You are not supposed to ignore the rules. They do not give you a chance not to follow the rules because they will be watching you. They shout, 'don't stand at the door step, the baby will be stuck at the birth canal entrance.' You do not want to argue with them because if any problems arise in future they will say we told you so.*

CM 7: *During pregnancy women prefer different things. Sometimes they do not want relish with cooking oil. Same applies when they are in labour. The baby in the womb controls them. The baby in the womb is the one who calls its father. For instances, my son's wife could not deliver until we called the husband. Once the husband entered the labour ward she delivered.*

The possible explanation to this assertion is the influence of hormones on some of the women's preferences during pregnancy.

Despite cultural restrictions on presence of men in labour, participants revealed that in some circumstances men were called into the labour ward when their wives experience some complications and to force the wife or the husband to confess any infidelity. One community member revealed,

CM 2: *There are no taboos in not allowing husbands during labour. Long back husbands were allowed in labour so that if the woman was promiscuous she would be forced to confess, and the wife would deliver.*

CM 4: *They would be called in when the woman failed to deliver. Yes, she would not deliver. Let me tell you what would happen. One would have been told that you will deliver at 2 and she may not deliver at 2. If the husband is promiscuous that can cause the wife not to deliver too.*

CM 1: *Ehe. If she confesses that I did this and that the baby would come out with no problems.*

Some of the myths and misconception are detrimental to women's mental and physical health. For example, in Ethiopia (Warren, 2010:102), women delivered at home because after delivery they were required to deliver the placenta in a hole, exposing women to infection and excessive bleeding. Community and women's education need to be intensified to encourage shedding off those myths and misconceptions that are detrimental to health.

5.12.2 Religious beliefs, practices and taboos

Consistent with findings in Cycle 1, participants in this cycle reported that women belonging to Apostolic churches use holy water to stabilise pregnancy. Table 5.16 summarises the religious beliefs, practices and taboos reported by participants in this cycle.

Table 5.16: Religious beliefs, practices and taboos

Antenatal	Intrapartum	Postnatal
Use of holy objects and fluids	Use of holy objects and fluids	Use of holy objects and fluids

5.12.2.1 Use of holy objects and water

Consistent with findings in Cycle 1, participants in this cycle reported that women who belong to the Apostolic sect are given water that would have been prayed for, to drink during pregnancy until they deliver. Participants in this cycle did not report women using holy objects. One community member who belonged to one of the Apostolic sect had this to say:

CM 7: *We give pregnant women water that has been prayed for to wade off evil spirits. Women are instructed to drink warm water until delivery time.*

PNW 7*: You drink the water from the time you reach 8 months until delivery. You take as much as possible.*

Dodzo, Mhloyi, Moyo and Dodzo-Masawi (2016:6) found that pregnant women belonging to ultra-conservative Apostolic in Zimbabwe reported using anointed oil, stones, milk or water. Similarly, UNICEF, CCORE and MCONSULTIN GROUP (2011:33) alluded to these practices in a study on Apostolic religion, health and utilisation of maternal and child health services in Zimbabwe.

This section presented and discussed behaviour regarding available resources and utilisation of maternal healthcare services, barriers and enablers to utilisation of maternal healthcare services. The findings of this cycle showed that, although there are still some grey areas that need to be addressed after the implementation of the developed initiatives, there were some changes noted in the utilisation of maternal healthcare services at St. Michaels Mission Hospital. For example, there is an increase in the flow of health information from health personnel to the community, knowledge on importance of follow-up visits has increased, health personnel are aware of patients' rights and are changing their attitude and behaviour towards clients and more male partners are showing willingness to participate in maternal healthcare.

At the same time, the findings showed that there is need to continue engaging the religious groups to allow women to attend health facility, issue family planning services and dispel religious and cultural myths and misconceptions that prohibit women to adopt positive health behaviours.

The reflections of the CIG members during the development, implementation and evaluation of the initiatives will be presented in the next section.

5.13: Findings: Section C: CIG members' reflections

The objective of this section was to describe the CIG members' reflections on the PAR cycles of planning and acting on the developed initiatives for enhancing utilisation of maternal healthcare services in Mhondoro-Ngezi district. Vallenga, Grypdonck, Hoogwerf and Tan (2009:85) note that reflection is integral to PAR. Reflections by CIG members were continuous throughout the study inorder to make decisions about the next move. The unit of analysis were the same CIG members who were purposively selected to develop and implement the initiatives in objective 2.1 in chapter 2. The researcher presented the findings from objectives 3.1 and 3.2 to the CIG members. A discussion followed to reflect on the findings and the overall PAR process. Qualitative data was collected from the CIG members' reflective journals and the minutes of the meeting. Data was analysed using Tesch's method (1990) suggested by Creswell (2012:237) as described in objective 1.2.

5.13.1 Changes brought about by developed initiatives

The general aim of a cooperative inquiry is participation of the community members and allowing them to effect the change they have developed. This section discusses the changes reflected on by the CIG members in their journals after the implementation of the initiatives in enhancing utilisation of available resources and maternal healthcare services in Mhondoro-Ngezi district. Table 5.17 summarises the changes that the CIG members attributed to the initiatives they developed and implemented.

Table 5.17: Changes brought about by initiatives developed by the CIG members in Mhondoro-Ngezi district

	Antenatal	**Intrapartum**	**Postnatal**
Maternal healthcare system related	Improved practice (availability of health care information booklet)		
	Improved feedback mechanism (check-list)		Improved feedback on care
	Identified shortfalls (need to provide adequate information for women to comply)		
		Sensitised on ingidenous practices	
		More ethical practice	
		Gained knowledge (need to provide adequate information for women to comply, women use herbs in labour)	Gained knowledge (need to provide adequate information for women to comply)
	Collaborative research	Collaborative research	Collaborative research
	Sensitised on negative health personnel attitude		
	Improve care after training (testimony)		
Maternal healthcare user related	Improved treatment adherence		
	Provision of healthcare information booklet (improved practice)		
		Collaborative care	
	Sensitised to patient's rights (check-list to improve relationship and respect patients' rights)		
	Empowered with knowledge		
	Improved knowledge		
Support system related	Improved male involvement		
	Incentive (vital signs monitoring)		
Community related	Community collaboration (dialogues, CIG members worked well together)	Community collaboration (dialogues, CIG	Community collaboration (dialogues, CIG

		members worked well together)	members worked well together)
	Provision of healthcare information booklet		
	Sensitisation on male partner involvement		
	Acquired knowledge		

5.13.1.1 Maternal healthcare system related changes

The PAR which was undertaken by CIG members brought out some changes in practice through improved feedback, ethical practice, acquisition of knowledge and collaborative research. Maternal healthcare system related changes are summarised in Table 5.18.

Table 5.18: Maternal healthcare system related changes

Antenatal	Intrapartum	Postnatal
Improved practice (availability of health care information booklet)		
		Improved feedback on care
	Sensitised to indigenous practices	
	More ethical practice	
Improved feedback mechanism (check-list)		
Identified shortfalls (need to provide adequate information for women to comply)		
	Gained knowledge (need to provide adequate information for women to comply, women use herbs in labour)	Gained knowledge (need to provide adequate information for women to comply)
	Collaborative research	Collaborative research
Sensitised on negative health personnel attitude		
Improved care after training (testimony)		

- **Improved preactice**

After the researcher and the CIG members had analysed the returned filled in check- lists from the women who had received maternal healthcare services at St. Michaels Mission Hospital, one community member commented that the care provided in the antenatal unit had improved but there were still no changes noticed in the delivery room. The following observations were recorded by one of CIG members,

CIG member 2: After *looking at what came out from the check- lists I noticed that there is an improvement during booking, but the problem is still there when women are delivering. Women are requesting to be treated with respect.*

The research was beneficial to CIG member 7 as she had an opportunity to reflect on her practice and question some of the assumptions she had. The following sentiments were entered in her journal,

CIG member 7: *Being part of this research it really helped me in my area of practice. It was an eye opener on some issues that I took for granted as a health personnel worker.*

CIG members appreciated the training that was conducted for maternal healthcare providers after they noticed improvement in the provision of care. Commenting on the improvement in care, one CIG member wrote in her reflective journal,

CIG member 2: We *are happy with the training that was conducted with nurses. We are seeing an improvement in the way they are caring for patients.*

CIG member 1: *If the situation remains the same after the awareness, our communities will not have problems. This is because there will be no woman delivering at home. They will all go to the hospital*.'

Women who were receiving care at the hospital also testified that they were being treated better than before as evidenced by the following statement entered in one of the journals,

CIG member 3: *Women are now saying they are being treated better*.

These findings resonate well with PAR design of setting out to study something inorder to change and improve it. Consistent with these findings, women in a study conducted by Mason, Dellicour, Kuile, Ouma, Philips-Howard, Were, Laserson & Desai (2015:3) viewed services offered during ANC positively as they received care in good time.

- **Improved feedback mechanism**

The developed check-lists that women used to evaluate the care rendered during their encounter with health personnel at the hospital provided the midwives with feedback on the quality of care they rendered and provided the women with an opportunity to relay the issues they needed to be addressed. The following sentiments were expressed by one of the CIG members in her journal entry,

CIG member 2: *I am happy that the nurses were trained, and women are now able to report if they are not happy with the way they have been served and also that the issues they would have raised would be attended to promptly*.

The check-list provided a platform for women to communicate their complaints as one of the CIG members noted,

CIG member 3: *The form with questions which women will fill in indicating whether they were happy with the care they received is very good.*

Ongoing open dialogue with communities in the provision of quality maternity care is crucial in enhancing utilisation of maternal healthcare services. Consistent with these findings, a study conducted by Wright, Davey, Elmort, Carter, Mounce, Wilson, Burt, Roland and Campbell (2016:430) revealed that, real time feedback methods were useful for collecting information about patient experiences in United Kingdom general practices. Similarily, Lucock, Halstead, Leach, Barkham, Tucker, Randal, Middleton, Khan, Catlow, Waters and Saxon (2015:642) observed that use of feedback reports to evaluate psychotherapy care, were useful channels of communication.

- **Collaborative research**

The CIG members worked collaboratively together, sharing ideas and using their experiences to inform the next stage of the study. Appreciation of the nature of the methodology was reflected in the following entry,

CIG member 5: *The purpose of our group will be to look at the results of the study to see why women are not using the hospital. We look at the ways we can encourage women to use the hospital. Then we go back and see if women are now using the hospital.*

CIG member 7: *We were told that we were assisting in coming up with ways of assisting pregnant women to want to use clinics and hospitals during pregnancy, when they are delivering.*

CIG member 6: *We will be looking for ways to help women to use hospitals or clinics during pregnancy, delivery and after delivery. We will work together going in cycles and repeating some of the activities.*

The strength of this study was that, professional knowledge and local knowledge was merged in a collaborative process in undertaking the research. Collaborative research has gained momentum over the years. Through participation in a national clinical study called STARSurg Collaborative Network, Chapman, Glasbey, Khatri, Kelly, Nepogodiev, Bhangu and Fitzgerald (2015:1) rmedical students in United Kingdom reported that their confidence was increased, and they appreciated the academic principles and skills they learnt.

- **Sensitised on indigenous knowledge and practice**

Commenting on use of herbs by women during childbirth, one of the CIG members wrote:

CIG member 7: *Through this research I realised that no matter how much we want to deny it, pregnant women use these traditional herbs to induce labour pains….*

The use of herbal medicines in pregnancy has been reported worldwide in literature and in this study. The study not only sensitised healthcare personnel on indigenous knowledge and practices but also opened channels of communication in which women are encouraged to inform the healthcare provider if they have taken herbs and in turn, the healthcare provider asks the women about use of herbs without being judgemental. To pursue this issue, further health education awareness campaign may need to be initiated, directed at both the maternal healthcare providers and women on the benefits and dangers of using herbs in pregnancy, labour, delivery and after delivery as well as emphasising the need for open communication.

- **Sensitised on negative health personnel attitudes**

The study sensitised one of the CIG members on the negative attitude that some of maternal healthcare providers expose women to.

CIG member 7: *Through the research and dialogues with people in the community I have learnt that negative health personnel attitude is the major barrier for women to using healthcare services. The way they are treated at the hospital makes them [women] prefer to stay at home (which has serious consequences especially for pregnant women) than to come to the hospital where they are shouted at and ridiculed.*

Contrary to findings in this study, were participants reported that women were disrespected, majority (93%) of women in a study conducted in Haiti reported having felt respected by their providers during their last encounter with them (Mirkovic, Lathrop, Hulland, Jean-Louis, Lauture, D'Alexis, Hanzel & Grand-Pierre, 2017:4).

- **More ethical practice**

After training of health personnel, the CIG members were happy that midwives were sensitised on patient's rights, especially on the need for confidentiality and not to abuse patients verbally and physically. Commenting on the issue, one CIG member wrote,

CIG member 2: *I am happy that the nurses were trained. Nurses also now know that to hit patients or to shout at them is an offense. They also know that they should keep patients' information to themselves.*

CIG member 2: *Some nurses have changed their behaviours, but others are still the same.*

By developing and implementing the check-list to evaluate midwives' interactions with women, the study consolidates and expands previous research by providing tangible interventions to monitor healthcare providers' interaction with maternal healthcare users.

- **Gained knowledge**

CIG members acquired new knowledge on the importance of iron supplementation in pregnancy. For example, CIG members indicated that they did not know that some babies could be born deformed due to insufficient iron. One of the members commented,

CIG member 3: *The brown pills that are given to pregnant women help in preventing women from giving birth to deformed babies. I didn't know that.*

Pregnant women are given iron supplements during pregnancy because insufficient folate and folic acid intake before conception or during early pregnancy is associated with birth defects which include anencephaly, spina bifida and encephalocele. These defects arise during the structural development of the neural tube (De-Regil, Fernandez-Gaxiola, Dowswell & Pena-Rosas, 2015:3).

CIG member 7 also learnt that herbs were strongly used by women during delivery. The realisation made her acknowledge their existence and started incorporating the knowledge into practice by becoming more vigilant. In addition, the same CIG member also learnt that it is important for an interactive relationship with the birthing woman to ensure that they disclose if they have taken herbs and collaboratively ensure a positive outcome. The following sentiments reflects the CIG member's enlightenment,

CIG member 7: *…This realisation [use of herbs in labour] also helped me to explain some of the precipitate labours and foetal distresses that occur*.

The crucial importance of this acquisition of knowledge is that, it allowed reconstruction of knowledge grounded in dialogue of communicative action as suggested by Morrow and Torres (2002:53). Secondly Habermas' epistemological perspective was reconstructed through the concept of critical hermeneutics based on three knowledge interests as discussed in Chapter 3.

5.13.1.2 Maternal healthcare user related changes

Adherence to prescribed treatment and collaborative care were some of the changes that were noted in the reflective journals. Table 5.19 summarises the maternal healthcare user related changes reported by CIG members in the reflective journals.

Table 5.19: Maternal healthcare user related changes

Antenatal	Intrapartum	Postnatal
	Collaborative care	
Improved treatment adherence		
Provision of healthcare information booklet (improved practice)		
Sensitised to patient's rights (check list to improve relationship and respect patients' rights) Empowered with knowledge		
Improved knowledge		

- **Improved treatment adherence**

If women and community members are given information and the rational, they comply and adhere to recommended protocols. The reason why women were throwing away the iron tablets was because they had inadequate information and after the awareness campaign on the importance of iron tablets, they complied with the prescribed treatment. In that regard one CIG member commented,

CIG member 5: *We heard from sister [the midwife] that some women were throwing away the brown pills because they did not know their importance. Women are now interested in drinking the pills because they are being told why they need to drink them.*

The study has shown that when pregnant women are provided with adequate information on the importance of iron supplementation they comply. It is therefore, important for maternal healthcare providers to provide adequate information to women. In rural Burkina Faso, Compaore, Gies, Brabin, Tinto and Brabin (2018:1) reported that poor periconceptional adherence to weekly iron and /or folic acid supplementation was due to health information inadequacy on the health benefits.

- **Provision of evaluation forms and health information booklet**

The check-list that was developed by the CIG members serves to establish the quality of care women receive at the hospital and the information booklet assists in the provision of health education talks.

CIG member 2: We *now have somewhere women can write their complaints and books that are now used in the community to teach women and all community members*.

The study has shown that provision of birth preparedness information booklet to health personnel, community health workers and community members provided reference material for clarifying health issues and an opportunity for couples to read the book together and discuss maternal health issues respectively. In addition, the birth preparedness information booklet was recommended by CIG members to all women to use as a tool to engage men on maternal health issues as it covered all aspects of matrescence. Unfortunately, due to financial constraints the birth preparedness information booklets were only available in all district clinics and village health workers that serve St. Michaels Mission Hospital, yet the CIG members wanted the birth preparedness information booklet to be distributed to all women who came for antenatal clinic so that the women would read the books while at home.

- **Check-list to improve relationship and respect patients' rights**

By allowing women to air their views on the quality of care received using the developed check-list, the relationship between the women and the midwives was improved. In addition, the women were made aware of their rights and need for midwives to respect these rights.

CIG member 2: *We now have somewhere women can write their complaints and books that are now used in the community.*

CIG member 3: *The form with questions which women will fill in indicating whether they were happy with the care they received is very good.*

Miltenburg, Lamberman, Hamelink & Meguid (2016:1) note that human rights principles need to be translated into measurable frameworks. By developing and implementing the check-lists using the Rights of the Childbearing woman framework, the CIG members allowed the maternal healthcare providers to assess how much they were adhering to human rights principles. Furthermore, Ruffinem, Sabido, Diaz-Bermudez, Lacerda, Mabey, Peeling and Benzaken (2015:9) advise that the development of tools such as check-lists in poor resource settings facilitates sustainable public health interventions.

- **Collaborative care**

Not only did the CIG members understand the nature of the study but they also worked collaboratively together. This is in line with PAR's core values of involving community stakeholders in every aspect of the research. The study cycle experience allowed the CIG members to collaboratively articulate and share their views, opinions and knowledge in an environment where others listened.

CIG member 7: *As a group we managed to work well together. The group had people who had very good ideas and that helped us in moving forward together.*

CIG member 2: *We worked together very well, and we had a pleasant time.*

Collaboration among CIG members contributed to a change in practice in Mhondoro-Ngezi district, which was the sole purpose of this study. McKay, Bell and Blake (2011:9) affirm that community-based collaboration can enhance the relevance and usefulness of the research findings.

- **Empowered with knowledge**

One CIG member commented that women were empowered with knowledge on the importance of seeking maternal healthcare services.

CIG member 2: *Although some women were coming to book they did not know why it was important for them to come and why it was bad for them not to come. Women now know why it is important for them to come to hospital.*

The study empowered the CIG members with skills in talking with people in the community on maternal health issues.

CIG member 5: *I have learnt how I should approach people in the community, talking to them nicely and that I should also have adequate information.*

CIG member 1: *On providing good care to pregnant women, I now have more knowledge on how to assist pregnant women.*

Consistent with these findings, Serbanescu, Goldberg, Danel, Wuhib, Marum, Obiero, McAuley, Aceng, Chomba, Stupp and Conlon (2017:11) reported a reduction in maternal mortality in Uganda and Zambia following the saving mothers, giving life initiative.

Since the rationale for choosing cooperative inquiry over other approaches that inform PAR was the acquisition of knowledge through action and joint reflection by group members, the study managed to meet its mandate. Support system related changes will be discussed next.

5.13.1.3 Support system related changes

The CIG members reflected on the changes and commented that there was improved male involvement after the awareness campaign. Support system related changes reported in the CIG members' reflective journals are summarised in Table 5.20.

Table 5.20: Support system related changes

Antenatal	Intrapartum	Postnatal
Improved male involvement		
Availability of incentive (vital signs monitoring)		

.

- **Improved male involvement**

The concept of male involvement in maternal healthcare is new to most Africans. Traditionally, pregnancy and childbirth have been women's domain (Kululanga, Sundby, Malata & Chirwa, 2012:153). Therefore, the provision of information related to importance of male partner participation and involvement in maternal healthcare in this study stimulated debate on cultural issues related to male involvement and sensitised the community on the issue. The following journal entry from one of the CIG members observed:

CIG member 1: *Now people are aware that both mother [woman] and father [the husband] should go together to the hospital.*

CIG member 5: *Most men are now supporting their wives though it depends with an individual.*

Kululanga, Sundby, Malata and Chirwa (2012:145) noted that the intense health education on male partner involvement in maternal health issues has gained momentum in recent years since WHO advocated for its inclusion as an essential element for safe motherhood.

In the East and West Kassena- Nankana Districts in Ghana, young men who supported their wives in independently seeking care were reportedly literate and had been exposed to other cultures that allowed women to make decisions (Aborigo, Reidpath, Oduro& Allotey (2018:5). While in Uganda some mothers reported lack of support from their partners even when purchasing items for delivery or searching for transportation to the health facility (Morgan, Tetui, Kananura, Ekirapa-Kiracho & George, 2017:16). The changes in behaviour reported in this study after the implementation of initiatives are suggestive that the initiatives had an impact.

Change is a process and it does not happen overnight. There is need therefore, to continue creating awareness to encourage male engagement and involvement in maternal health issues.

- **Availability of incentive (vital signs monitoring)**

For men to be motivated to accompany their wives to a health facility during childbirth CIG members proposed health personnel to check their vital signs whenever they come with their wives.

CIG member 7: *We agreed that husbands should accompany their wives. We do not want to separate them. We want them to be attended to together. We want to offer them what we called male package. That is what we thought we should do. When they get in, as the nurse attending to them I will check the father's temperature, blood pressure and weigh him. So that he feels that when he comes with his wife he is not wasting his time.*

These findings addresse the concerns raised by men in a study conducted in Malawi (Kululanga, Sundby, Malata & Chirwa, 2012:150), were men who accompanied their wives to a health facility complained that apart from being asked to have an HIV test, women had physical examination, blood investigations and vital signs monitoring while they waited outside unattended. To encourage men to accompany their wives for antenatal care and to participate in HIV testing in East and West-Kassen-Nenkana district in the Upper Region of Ghana, men were given access to critical information on the reproductive health of their partners (Aborigo, Reidpath, Oduro & Allotey, 2018:5).

5.13.1.4 Community related changes

The study provided an opportunity for collaborative dialogues and action in enhancing utilisation of maternal healthcare services in the community. Table 5.21 shows a summary of community related changes as reflected by CIG members.

Table 5.21: Community related changes

Antenatal	Intrapartum	Postnatal
Community collaboration (dialogues, CIG worked well together)	Community collaboration (dialogues, CIG worked well together)	Community collaboration (dialogues, CIG worked well together)
Provision of health care information booklet		
Acquired knowledge		

- **Community collaboration**

The CIG members engaged in dialogue and worked collaboratively together. The involvement of community members in the development of the posters and birth preparedness information booklets and subsequent dissemination proved to be a successful initiative. The following comments on the experience with other CIG members

during the development and implementation of the initiatives to enhance utilisation of maternal healthcare services confirms the collaborative efforts.

CIG member 2: *We worked together very well, and we had a pleasant time*.

CIG member 7: *As a group we managed to work well together. The group had people who had very good ideas and that helped us in moving forward together*. *As a CIG of Mhondoro-Ngezi we will not stop working together and educating the community. This research has shown that we have the potential to do great things if we work together*.

Engaging the community in research has become increasingly popular in medical and public health (Westfall, Ingram, Navarro, Magee, Niebauer, Zittleman, Fernald & Wilson, 2012:250). For example, involvement of community health workers, community leaders and teachers in the distribution of health information on syphilis and HIV screening in Brazilian Amazon sensitised community members on the importance of routine screening (Ruffinem, Sabido, Diaz-Bermudez, Lacerda, Mabey, Peeing & Benzaken, 2015:7). By involving community stakeholders in the development and implementation of initiatives to address maternal healthcare issues in Mhondoro-Ngezi district, the study allowed dialogue between healthcare providers and the community. This was crucial for collaborative interventions and for building mutual respect. This is also in line with (Khan & Chovanec, 2010:36)'s view that PAR is a collaborative process that includes all those who are affected by the issue being researched.

- **Acquired knowledge**

Community members also acquired knowledge as they participated in the generation of new knowledge.

CIG member 2*: I am happy that I now know what the brown pills that are given to pregnant women are for. I would drink them, but I didn't know what they were for. Sometimes I would not drink them at all. Therefore, people should be educated about information that is important to human life.*

CIG member 1: *On the issue regarding the need for providing good care to pregnant women, I now have more knowledge on how to assist pregnant women*.

The study underscored the importance of knowledge sharing. The CIG members were afforded an opportunity to gain new knowledge as they shared their experiences. The knowledge gained was useful in their everyday lives. This is crucial as the theoretical knowledge gained was transformed into everyday use. To support this notion, Graham,

Kothari, McChutcheon and Integrated Knowledge Translation Research Network Project Leads (2018:2) posit that health research is conducted with the intention of advancing knowledge and eventually translate into improved outcomes. The finding in this study is consistent with those in a study conducted by Shahandeh, Majdzadeh and Loori (2012:54) in Tehran where participants reported that the participatory process helped in formulation of more comprehensive drug abuse prevention programs useful to the community.

- **Provision of health information booklet**

The birth preparedness information booklet that was developed by the CIG members provided health information to individuals, families and community members and in the process created channels of communication.

CIG member 2: *We now have books that are now used in the community. The book serves to bring men and their wives together to hospital.*

CIG member 3*: The information that is in the book we developed is welcomed by the community members.*

WHO (2016:1) defines health education as any combination of learning experiences designed to help individuals and communities to improve their health, by increasing their knowledge or influencing their attitudes. The development and provision of appropriate information booklet to community members by community stakeholders in this study was very crucial for both the individual women and community in acquiring necessary information to make decisions or change health behaviours. Previous studies (Lu, Tang, Lei, Zhang, Lin, Ding & Wang, 2015:8; Zhou, Ning, McCann, Liao, Yang, Zou, Jiang, Liang, Abdullah, Qin, Upur, Zhong, LiYe & Liang, 2017:6) have demonstrated that educational interventions may help in improving outcomes. For example, in China, the knowledge about male circumcision increased after educational interventions (Zhou, Ning, McCann, Liao, Yang, Zou, Jiang, Liang, Abdullah, Qin, Upur, Zhong, LiYe & Liang, 2017:6).

This section discussed the CIG members' reflections. The excerpts suggested that the study circle experiences contributed and assisted the CIG members in having the opportunity to raise their level of knowledge, articulate and share their existing knowledge in an emancipatory and empowering manner. The data and resultant themes provided an emergent knowledge in relation to the members' perceptions, feelings and experiences from their own view points.

Researcher's reflections

Although the researcher's reflection was not part of the objectives in Cycle 3, a brief researcher's reflection will be presented next.

The PAR study was set up to collaborate with community stakeholders in developing initiatives to enhance utilisation of maternal healthcare services. The researcher performed an extensive literature review with the sole purpose of understanding the variables under study and an overview of utilisation of maternal healthcare services globally, regionally and locally as well as strategies that were adopted elsewhere. Keeping in mind that PAR can be focused on the first, second and third person, the researcher adopted the second person where people meet and interact through dialogue to improve practice. Having worked in a community set up before, the researcher's experience with community stakeholders became an asset for the field work, for interaction with study participants and for gathering data. The researcher established contact with the study area through the district nursing officer, the mission priest and local chief. Establishing contact was essential for negotiating around the research process activities, relationships, roles and responsibilities and access to the area.

The researcher's personal development began through the introduction to action research as a research design and to day to day interaction with the St Michaels Mission Hospital community. In the planning stage, the researcher decided to undertake the situational analysis first to ascertain the factors influencing utilisation of maternal healthcare services in the district. The results of the situational analysis were then presented to community stakeholders. The use of CIG members as collaborators in the study was reached after considering that the knowledge and experiences of community members with a stake in maternal health was crucial in the development and implementation of the initiatives.

Keeping in mind the aim of the research, the researcher-initiated dialogue with the purposively selected CIG members. The researcher introduced self to the CIG members and emphasised that the participants were free to ask questions. The researcher gave a brief description of the purpose of the study, PAR, CIG processes and the CIG roles in the study. It was emphasised that it was the CIG members who were experts and that their experiences and knowledge were valuable to the study. The discussions resulted in common decision and the researcher was given the primary responsibility of translation, transcribing and report writing. During the field work, the researcher realised that the success of the study was not isolated to one person but required reflections together with supervisors, colleagues and the health personnel at St. Michaels Mission Hospital.

The researcher perceives that the study was a success because there was high level of participant engagement and commitment, good working relationships and collaboration among all participants. The researcher's overall reflection is that, community members are loaded with indigenous knowledge which gave a broader picture of factors influencing utilisation of maternal healthcare services in the district. The researcher asserts that a PAR approach to this study contributed to sustainable changes in the participants' knowledge related to areas they identified as critical in enhancing utilisation of maternal healthcare services. Experiences gained from participating in the study gave new solutions in practice and saved as a basis for evaluation of practice and future studies.

The researcher's role as a facilitator varied from actively leading to taking a step back to allow the participants to be more involved. The CIG members were self motivated. The lesson learnt from this PAR study was the need for intensive consultation and lobbying for community leaders support. The experiences in this study are important for promoting community-based research with community stakeholders.

5.14 Conclusion

This chapter has presented and discussed the results of Cycle 3, in which the impact of the developed initiatives after implementation of the developed initiatives was evaluated. Statistically, changes are noted in the utilisation of postnatal care services. Results of the focus group discussions with maternal healthcare providers and CIG members' reflections recorded major changes. The positive impacts of the developed initiatives were the development of information booklet and the awareness campaign on pertinent issues that emerged in the situational analysis cycle. The awareness stimulated discussion and sensitised the community members on maternal healthcare issues. The reflections demonstrated that from an individual perspective, the research process experience was beneficial. The next chapter will conclude the study and offer some recommendations and limitations to the study.

CHAPTER 6

CONCLUSION, LIMITATIONS, STRENGTHS AND RECOMMENDATIONS

6.1 Introduction

'No woman should die while giving life' is a common mantra in midwifery practice. It was from this premise that the researcher undertook a participatory action research with community stakeholders in Mhondoro-Ngezi district in Mashonaland West Province in Zimbabwe, with the sole purpose of developing initiatives for enhancing utilisation of maternal healthcare services. This overall aim was achieved as reflected in chapter 4. The researcher did not only hope to enhance utilisation of maternal healthcare services across the continuum of care but also to empower community members and specifically women of child bearing age with critical thinking skills to address barriers inhibiting utilisation of maternal healthcare services.

A multiple method approach combining quantitative and qualitative methods sequentially in three cycles of exploring maternal healthcare services utilisation, developing and implementing initiatives and evaluating the impact of the initiatives for enhancing utilisation of maternal healthcare services was employed in this study. Two research questions were set up for the study;

1) What socio-cultural, economic, religious and operational factors influence utilisation of maternal healthcare services in Mhondoro-Ngezi district in rural Mashonaland West Province in Zimbabwe?

2) What initiatives can be developed for enhancing utilisation of maternal healthcare services in Mhondoro-Ngezi district in rural Mashonaland West Province in Zimbabwe?

To answer these questions, the researcher and the purposively selected CIG members critiqued the status quo and developed and implemented initiatives that addressed the identified maternal healthcare system, maternal healthcare user, support system, community, cultural and religious related barriers to utilisation of maternal healthcare services. In this Chapter, the conclusion, limitations and strengths of the study and recommendations will be discussed.

6.2 Research Methodology

Critical theory and a three cycle PAR design were used in this study to provide the theoretical framework and the philosophy and principles of the research. The cycles of plan, act, observe, reflect and evaluate provided the structural tool to apply the theory into practice by involving maternal healthcare providers, users and community members.

Critical theory played a significant role of critiquing the status quo and challenging the community stakeholders to empower themselves with research skills and effect changes in practice.

A situational analysis was carried out in Cycle 1 with the assumption that one needs to understand the situation at hand inorder to change it. The collaboration between the researcher and the community members started in Cycle 2 where findings from Cycle 1 were disseminated to community stakeholders during community meetings, staff meetings and day to day hospital activities. The meetings culminated into the formation of a cooperative inquiry group comprising purposively selected community stakeholders who critiqued, developed and implemented context specific initiatives for enhancing utilisation of maternal healthcare services. Although the situational analysis was undertaken by the researcher, after presentation of the situational analysis findings, the CIG members became increasingly engrossed in the continuous process of critiquing the status quo, development and implementation of the initiatives in Cycle 2 and they became co-researchers. In Cycle 3, the impacts of the initiatives were evaluated. Data generated in Cycle 1 were compared with data from Cycle 3 to ascertain if there were any changes after implementation of the initiatives. Data analysis was done concurrently with data collection because the results of each cycle informed the next cycle. Rigour was ensured using various strategies as discussed in chapter 2.

6.3 Conclusions

The first research question, namely, what socio-cultural, economic, religious and operational factors influence utilisation of maternal healthcare services in Mhondoro-Ngezi district in rural Mashonaland West Province in Zimbabwe could be answered with the results of Cycle 1. Factors that influence utilisation of maternal healthcare services during antenatal period in Mhondoro-Ngezi district were identified as follows:

- **Antenatal period**

Perceived user fees and incidental costs associated with access to services offered and onward transfer from the district to the central hospital, reportedly caused women to opt to stay at home than seeking care at health facilities. Shortage of resources such as scanning services, health personnel, sundries and drugs affected quality of care at health facilities and negatively impacted on outcome. The study findings revealed that women express displeasure at the time spent at the facilities while seeking services. Women are reportedly asked to wait until they are many before they are serviced despite having come to the clinic early resulting in some women opting out.

The individual factors that hinder utilisation of maternal healthcare services were cited as lack of knowledge on pregnancy conception, on importance of early initiation of antenatal care in the first trimester and postnatal care repeat visits, and women's apathy, laziness and procrastination. Previous childbirth experience, shyness for having had a child too early after delivery and indifference were some of the maternal healthcare user attitudes that the participants cited as reasons for women not utilising maternal healthcare services.

Because women view birthing as a normal process, the study findings revealed absence of problems as the reason some women had a negative attitude towards utilisation of maternal healthcare services. The study findings also revealed that women did not drink iron tablets prescribed to them by health personnel because of side effects and participants attributed the negative practice to poor counselling services about the importance of iron supplementation. Lack of money to buy food and baby preparation emerged as barrier to utilisation of health facilities especially at the mothers waiting home where women were expected to cater for themselves while waiting for delivery. Women were not using health facilities because they did not know that maternity services were free.

The perceived number of contact ANC repeat visits reportedly deter women from attending the recommended ANC contact visits. The study reported that women did not want to have more ANC visits as they had other responsibilities at home. Unmarried teeagers reportedly delay in booking their pregnancy because they fear they would be reprimanded by their families.

Trust in the care provided in the community by elderly women and relatives emerged as the reason women book their pregnancies late. The study findings revealed that women patronise elderly community members and traditional birth attendants during ANC to get herbs because they feared aborting or losing the baby from witchcraft.

Gender norms and beliefs regarding men's roles continued to be a barrier in male involvement in maternal health issues as some men insisted that childbirth issues are women's domain while some women discouraged their husbands from accompanying them to a health facility. The study revealed that because of presence of male midwife, some women were apprehensive and reluctant to seek maternal healthcare services in case the male midwife would ask them to undress and examine them.

Because health personnel advocated for partner HIV testing during pregnancy to ensure positive pregnancy outcome, some husbands/partners reportedly refused to accompany their wives to health facility for fear of being tested and used their wives' results as a proxy to their own. Fear of rejection by their husbands after receiving positive HIV results

reportedly cause some women not to come to the hospital. The study revealed that although there were some men who were interested in accompanying their wives to hospital, the long waiting time spent before service is rendered deter them.

The study findings also revealed that some religious groups in Mhondoro-Ngezi district did not allow their members to use the health facility but instead drank holy water during pregnancy in the belief that it wades off evil spirits that interfer with normal pregnancy and delivery. The belief that women should conceal their pregnancy for fear of witchcraft delayed pregnant women from seeking ANC services early in the district.

- **Intrapartum period**

The study findings revealed negative health personnel attitude as one of the major barriers to utilisation of maternal healthcare services. Participants reported that women are insulted when seeking health services, in most instances for minor omissions. Disrespect for and abuse of women at the hospital by some midwives reportedly deter some women from seeking maternal healthcare services during delivery. The participants commented that, although women knew that they were supposed to report any abusive treatment, they receive from nurses, they are reluctant to report because they are afraid that the next time they would come to hospital they would be treated worse. Furthermore, lack of trust in the care provided by midwives was cited as the reason some women are reluctant to seek maternal healthcare. This notion was compounded by poor quality of care experienced from the nurses which women believe attribute to the negative birth outcomes.

The factors that influence institutional deliveries in this study were issuing of birth records, giving incentives to women after delivery and national policy that prohibited traditional birth attendants from assisting women to deliver at home. Furthermore, participants reported that women prefer institutional deliveries because at health facilities there are pain control and prevention of complications during labour interventions. However, inability to integrate indigenous and Western medicine during childbirth reportedly hinder institutional deliveries as use of herbs in labour was not condoned by health personnel. Because some women do not want to come early in labour since they do not want to stay at the hospital longer utilisation of maternal healthcare services during delivery is affected resulting in some women delivering at home or on the way.

The study findings showed mixed feelings with regards to husband/male partner presence in the labour room, with women and elderly men strongly opposing the practice and younger men being indifferent. The findings of this study have shown that a lack of spousal

support due to cultural beliefs and traditions hinders male partner engagement and involvement in maternal healthcare issue.

Due to limited space and privacy at health facilities, health personnel reportedly did not allow husbands in the labour ward during delivery in contrasts with WHO recommendations that a parturient woman should be allowed a birthing companion of her choice.

Poor road network, terrain and transport problems were cited as barriers to utilisation of maternal healthcare services during delivery. The study highlighted the perennial absence of ambulances in the district. Where ambulances are not available, women find their own alternative transport in the community, in the form of ox or donkey drawn carts.

Fast labour was also cited as the reason women deliver at home or on the way to a health facility. The study reported that because women take some herbs to speed up labour they experience severe labour pains and the birthing deviates from the normal process resulting in the women delivering fast and without warning. Use of religious tents for maternal healthcare services was cited as the major religious barrier to utilisation of maternal healthcare services during delivery.

- **Postnatal period**

The major findings were that women defaulted on postnatal visits because of lack of information on importance of scheduled postnatal visits and fear of witchcraft. Afterbirth pains and aches were cited as some of the reasons some women do not return for the scheduled postnatal care. The situation is reportedly worsened if women must walk long distance while still in pain seeking health care services. Inability to return for scheduled postnatal return visits was reported to be due to illiteracy. Some women could not read the review dates written on their cards because they were illiterate.

The study reported that some healthcare personnel were reported to order women to remove strings tied on the babies or herbs that are put on the babies. These practices by nurses could be deterring women from seeking postnatal care as women believe the nurses would be exposing their babies to illness.

Findings revealed that postnatal attendances were affected by non-issuing of contraceptives at the mission hospital and presence of male midwives. The study reported that postnatal women expressed anxiety and discomfort in being examined by a male midwife.

The second research question, namely what initiatives can be developed for enhancing the utilisation of maternal healthcare services in Mhondoro-Ngezi district in rural Mashonaland West Province, Zimbabwe could be answered by describing the initiatives developed and implemented by the CIG members in Cycle 2, namely:

- Development of a check-list to be used by maternal healthcare users to monitor healthcare personnel attitude and provision of care.
- Facilitation and conduction of training of maternal healthcare providers on respectful maternity care and universal rights of the childbearing woman.
- Development and implementation of a birth preparedness information booklet.
- Development of posters used for creating awareness on the importance of male/partner involvement, importance of encouraging women to utilise maternal healthcare services and to assist each other in emergencies and disclosing use of herbs during childbirth.
- Engagement of hospital authorities on initiating and scaling-up home visits by health personnel.
- Faciliatation of the engagement of religious leaders on the provision of contraceptives.

The effect of the initiatives is described by comparing the baseline data obtained in Cycle 1 and data obtained in Cycle 3 related to maternal morbidity and mortality, focus groups with three stakeholder groups and reflections of CIG members. The main changes identified were:

Comparison of maternal morbidity and mortality rates with baseline data after implementation of initiatives

There was one maternal death that was recorded in June-July 2017 compared to none in June- July 2015 in the district. However, findings in this study indicate poor follow-up on maternal death. No proof of maternal mortality audit meetings was recorded in the cases that were recorded.

Before and after implementation of the initiatives, the following changes were noted on the attendances during ANC, intrapartum and postnatal periods:

- Generally, there was a decrease (69.2%) in the number of women who booked late in June-July 2017 compared to 78.9% in the same period in 2015.

- There has been a low HIV prevalence and a decline trend before and after implementation of the initiatives in the district.
- A high syphilis screening rate and low positive results has been reported in this study before and after implementation of the initiaitves.
- There was sufficient evidence ($p<0.001$) to show an increase in women who attended their second ANC visit in 2017 between June and July compared to the same period in 2015.
- There was no sufficient evidence to show a difference in women who had four or more ANC visits in 2017 compared to 2015 ($p<0.07$).
- Sufficient evidence was available to show a decrease in the proportion of live births at home in 2017 from June to July compared to the same period in 2015 ($p=0.03$).
- The number of still births (3) (33%) declined in the district between June and July 2017 when compared to the number of still births (6) (67%) recorded during the same period in 2015.
- Generally, there was an increase in the number of women who had postnatal care in June to July 2017 compared to the same period in 2015 in the district.
- There was a downward trend in the number of women attending postnatal care from day 1 up to week six in both years.

Comparison of maternal healthcare services utilisation with baseline data after implementation of initiatives

Although most of the barriers persisted after implementation of the initiatives, the participants reported an improvement in health personnel attitude after the training of health personnel on respectful maternity and introduction of the check-list to monitor their practices and behaviours towards women. In addition, there was evidence of acquisition of knowledge after the implementation of the birth preparedness information booklet as evidenced by focus group participants articulating the importance of attending the recommended visits during pregnancy and after delivery. Furthermore, after the awareness campaign on the importance of partner and community support to the childbearing woman, there was a change in perception resulting in a change in behaviour as both old and young men showed interest in being actively involved. Although some men were accompanying their wives to the hospital before the awareness campaign, there were no recording done to

that effect. The insertion of a column on the daily tally sheets used for ANC, delivery and postnatal care attendances helped in monitoring the extent of male partner involvement.

CIG members' reflection

The CIG members expressed how they felt about the experiences from their own subjective perspectives in the individual reflective journals. They acknowledged that they worked collaboratively together, sharing ideas and using their experiences in maternal health to inform the PAR process. The CIG members reported that their confidence was increased through day to day interactions in the CIG meetings as they critiqued the socio-cultural, operational and economic factors that influence utilisation of maternal healthcare services. They appreciated the principles and skills they learnt as they transformed the theoretical knowledge into evereyday use. The CIG members reflected that the participatory process helped in development of contenxt specifc birth preparedness information booklet that was useful for dissemination of health information and for use as reference material for clarifying health issues and to improve care. In addition, the developed check-list to monitor maternal healthcare providers' interaction with women and provision of care translated the human rights into measurable frameworks thereby empowering maternal healthcare users to voice their concerns without fear of reprimand. The CIG members reflected on the changes and commented that the study provided them with a space to stimulate debate on pertinent issues affecting the community through dialogue. The platform that was created for open discussions, paved the way for furthrer collaboration as evidenced by the CIG members' reflection on their willingness to continue.

6.4 Limitations and strengths of the study

The limitations and strengths of the study will be presented next.

6.4.1 Limitations

The major limitation of the study relates to the secondary nature of data that were used for quantitative analysis. This could have affected findings after implementation of the initiatives as the women who were exposed to the initiatives may not have been included in the evaluation. In addition, the sample size in this study was small. Three focus group discussions were conducted in Cycle 1 and again in Cycle 3 with maternal healthcare providers, postnatal women and community members at St. Michaels Mission Hospital and Murambwa Clinic which do not represent a true picture of the status of maternal healthcare services utilisation in Mhondoro-Ngezi district. Therefore, the data may not represent the whole district population but gives an idea of how maternal healthcare services are accessed and utilised in Mhondoro-Ngezi district in Mashonaland West Province in Zimbabwe. The period for implementation of the developed initiatives was limited to only

two months instead of four months previously planned due to limited time, resulting in small sample size for a t- test analysis. The test of proportion was used instead to analyse data, which was equally efficient.

Another limitation of the study was the CIG members' inability to provide each pregnant woman with a birth preparedness information booklet as had previously been planned. However, the developed check-lists and a copy of the birth preparedness information booklet was reproduced and distributed for use by maternal healthcare providers in all clinics in the district and to some of the village health workers in the community.

Despite the above limitations the study remains significant. The community stakeholders identified areas that needed interventions and engaged in iterative processes of action and reflection in developing and implementing context specific initiatives that enhanced utilisation of maternal healthcare services in the district.

6.4.2 Strengths of the study

The major strength of this study is its participatory focus with community stakeholders who represented populations that have a stake in maternal healthcare services utilisation and being able to develop and implement context specific initiatives in a collaborative manner. The community stakeholders had an opportunity to voice their concerns. Professional knowledge and local knowledge were merged in a collaborative process in undertaking the research. The study provides evidence that community-based research is feasible.

The study improved practice through i) the adoption of the check-list to evaluate practice, ii) provision of birth preparedness information booklet with important health information women should expect from healthcare providers and what they in turn should adhere to during pregnancy, delivery and after delivery and iii) the awareness campaign that sensitised the community on pertinent maternal health issues in Mhondoro-Ngezi district. The study unearthed the unprofessional and unethical conduct and practice by healthcare providers and challenged them to reflect and correct their behaviours in a positive way. In addition, the study sensitised healthcare providers on their inability to integrate indigenous and Western medicine in the existing model of care. The study highlighted the need to maximise the opportunity of providing and reinforcing positive health education by village health workers in the community. The ongoing critical reflexivity in this study enabled the CIG members and the researcher to explore the barriers as they emerged, deepening the understanding of the construct under study.

6.5 Recommendations

Based on the study findings, the following measures can be put in place for enhancing maternal healthcare services utilisation in Mhondoro-Ngezi district:

6.5.1 Nursing research

The following recommendations are made regarding research:

- The study findings highlighted that women were experiencing precipitous labour and birth complications due to their use of herbs during childbirth. It is recommended that further studies on the efficacy and dosage standardisation of herbal medicines should be conducted with the sole purpose of integrating the practices into midwifery practice.
- It is also recommended that a PAR with midwives should be conducted to explore the negative attitudes and practices related to provision of maternal healthcare services.
- Explore the impact of religious factors on maternal outcomes.
- Repeat the study in other districts of Zimbabwe and compare the results.
- Repeat Cycle 3 to determine sustainability of initiatives.
- Explore and describe each initiative in more depth.

6.5.2 Nursing education

The following recommendations could be incorporated in the midwifery curriculum.

- The study findings revealed inability by health personnel to incorporate indigenous knowledge and practices with modern medicine. Review of the midwifery curriculum and training programs should be undertaken to incorporate cultural sensitivity and competencies and to integrate evidence based indigenous knowledge into the Western medicine health care curriculum.
- Findings in this study revealed disrespect and maltreatment of maternal healthcare users. The study recommends ongoing workshops and on job training for midwives on respectful maternity care and the rights of the childbearing woman.
- The study findings revealed poor communication skills and unethical conduct, and this form the basis for on job training on communication and counselling skills.

Midwifery curriculum should be reviewed to include skills in different birthing positions.

- The developed birth preparedness information booklet, check-list and posters can be adopted by the Ministry of Health and Child Care and other community stakeholders country wide to expand general community-based education.

6.5.3 Midwifery practice

- The findings of this study highlighted the inability of midwives in integrating the indigenous and Western medicine. Midwifery practice would benefit from this study by integrating indigenous and Western medicine as a model for maternal healthcare provision.

- The study also highlighted poor health personnel attitude towards women and their families during childbirth. The study recommends ongoing use of the developed check-list to evaluate practice.

- Findings in this study revealed late initiation of ANC, few contact visits during ANC and postnatal periods. It is therefore recommended for continued community health literacy on importance of women attending routine scheduled ANC and postnatal contact visits through innovative and traditional information dissemination methods such as Mobile Health technology (mHealth), posters and media programs targeting mothers and families.

- Home visits should be initiated to ensure access of maternal healthcare services to all women regardless of cultural and religious beliefs.

- Findings in this study indicated poor follow-up on maternal death. No audit meetings were conducted for the recorded maternal deaths that were followed up to the central hospital. It is therefore recommended that guidelines and procedure manuals should be put in place for reviewing causes of maternal death to improve care.

- To ensure health personnel maintain confidentiality, the study recommends on job training on counselling skills and disciplinary measures on those who would have violated the principle.

6.5.4 Policy level

The study findings highlighted poor transport network and unavailability of food at maternity waiting home and non-issuing of contraceptives at the mission hospital. The women in the study area could benefit in the following manner:

- The intervention of the government through provision of ambulances to improve accessibility of maternal healthcare services.

- Provision of food at the maternity waiting homes to motivate women to utilise the facilities.

- The study suggests poor policy guidelines on the integration of biomedical medicine and herbal medicine in maternal health. The Ministry of Health and Child Care should develop clear policy guidelines on the integration of biomedical medicine and herbal medicine in maternal health.

- Non-issuing of contraceptive was a major barrier for utilisation of postnatal services at St. Michaels Mission Hospital. The Zimbabwe National Family Planning Council should engage and increase community-based contraceptives distributors to improve access to contraceptives by women of childbearing age.

6.5.5 Community level

- The study findings revealed that women did not report abusive behaviour and treatment by midwives because of fear of repercussions and normalisation of the behaviour by the community members. Community based health workers and maternal healthcare providers should create awareness on the universal rights of the childbearing woman at a larger scale.

- The study revealed that the role of traditional birth attendants and elderly community members was still valued by women. Their expert was valued due to their experience in providing herbs to women during pregnancy and delivery. A partnership program between skilled birth attendants and traditional birth attendants would go a long way in encouraging women to seek maternal healthcare services on scheduled visits and increase awareness on importance of these visits.

6.6 Contribution to existing midwifery knowledge

Use of PAR design and cooperative inquiry method in this study provided knowledge on learning about and working effectively with community stakeholders. The study added to the body of knowledge in relation with individual and community members' experiences of maternal healthcare services utilisation. Furthermore, the study demonstrated the effectiveness of health information dissemination using a community participatory approach in enhancing utilisation of maternal healthcare services. The study consolidates and expands previous research by providing tangible interventions (check-list) to monitor healthcare providers' interaction with maternal healthcare users and a birth preparedness

information booklet to guide health education sessions at health facility and in the community. Raw data has been generated in this study which may provide scope for further research using other methodologies.

Other contributions to existing midwifery knowledge brought about by the initiatives documented after implementation of the developed initiatives were:

- Improved practice as evidenced by CIG members and community members testifying that women were now being examined and treated with respect and dignity.
- Sensitisation of community members on the need of male partner involvement in maternal healthcare.
- Improved treatment adherence by antenatal women in the uptake of iron supplements.
- Acquisition of knowledge and empowerment of women and community members with information through the awareness campaign and provision of birth preparedness information booklet.
- Community members and health care providers worked collaboratively in creating awareness to enhance utilisation of maternal healthcare services
- Collaborative research was undertaken by community stakeholders and led to acquisition of research skills.

6.7 Dissemination of Results

Meetings were conducted with the CIG members to discuss the findings and to help in the drawing up of recommendations. Since this study was being carried out for doctoral studies, a thesis was produced which will be accessed in the University of Pretoria library. The thesis consisted of six chapters. Chapter 1 covered the overview of the study, Chapter 2 discussed the philosophical foundation and the methodology, Cycle 1 findings and literature control were discussed in Chapter 3, the development and implementation of the initiatives were in Chapter 4, Cycle 3 findings were in Chapter 5 and lastly Chapter 6 covered the conclusion, recommendations and limitations to the study. Parts of the study will be published in accredited journals. The following articles are being developed for publishing in accredited journals:

- Barriers to utilisation of maternal healthcare services
- Community stakeholder information dissemination/ enhancement using PAR

- Influence of beliefs, practices and taboos on maternal healthcare services utilisation: a qualitative study

6.8 Conclusion

Women in Mhondoro Ngezi district do not book their pregnancy before three months and some women only come to give birth in order to obtain birth records and few women utilize postnatal care services at day 7 and six weeks resulting in missed opportunities in full uptake of scheduled interventions. Barriers to utilisation of maternal healthcare services in this study evolved around operational, individual cultural and religious factors. Enablers to utilisation of maternal healthcare services were provision of health information through awareness campaign and information booklet, check-list for evaluation of health personnel attitudes and behaviour and provision of incentives such as birth confirmation records.

The primary purpose of a PAR project is to produce practical knowledge that is useful to the community in their everyday lives and in the process able to empower the community to make decisions that enhance utilisation of maternal healthcare services. Through ongoing reflections, the CIG members were also empowered. This was possible because the project was conducted *with*, *for* and *by* the people in the questioning of the status quo and making sense of the knowledge generated which, in turn, informed the research process and, in the action, as posited by Reason and Bradbury (2001:2).

In the theory of knowledge-constitutive interests, Habermas (1971:308-310) distinguished between empirical-analytic (or positivist), hermeneutic (interpretive) and critical-dialectic approaches in knowledge construction and their corresponding interests of technical or instrumental, practical and emancipator respectively. The researcher would like to conclude that all three kinds of knowledge generation were employed in practice. The technical form of knowledge being oriented towards functional improvements and measured in terms of its success in changing outcomes of practice (Reason & Bradbury, 2001:92), were in this study located in the changing of the health personnel attitudes towards their day to day interactions with maternal healthcare users. This form of knowledge was reached through open deliberation during health personnel training and monitoring. The practical knowledge was gained through the CIG members' understanding of factors that influenced utilisation of maternal healthcare services and their involvement in the development, implementation and evaluation of the initiatives. The emancipatory knowledge was reached through the CIG members' acquisition of research skills.

The study was successful in both changing the practice and empowering the participants. Mhondoro-Ngezi district's experiences of developing birth preparedness information

booklet, evaluating practice and creating awareness illustrate that interventions designed specifically for local context and involve the users at various stages of development process, can ensure adoption and use. The study showed the importance of adopting a community approach to enhance utilisation of maternal healthcare services.

The researcher concludes that using PAR to explore and implement initiatives to enhance utilisation of maternal healthcare services provided an impetus for improving antenatal, intrapartum and postnatal attendances in Mhondoro-Ngezi district and suggested ways to enhance utilisation in other settings. The dialectical process of raising the CIG members' thinking positions, proposing new ways of doing things, acting and doing infused the PAR study as suggested by McIntyre (2008:31). The cyclic nature of the study promoted reflection and reconstruction of experiences leading to enhancement of the CIG members' lives both at the individual and community levels. However, to improve PAR projects in future, the reseacher suggests more engagement in the implementation phase to ensure more changes are recorded.

Finally, women's maternal healthcare seeking behaviour remains complex and cannot be changed overnight. In this regard, further enhancement of awareness campaign at a larger scale must be done. In addition, the complexity of women's maternal health seeking behaviours can be changed through targeting individual factors that affect positive behaviour. Adoption of the developed check-list and birth preparedness information booklet can contribute to strengthening health information dissemination nationally and beyond.

REFERENCES

Aborigo, R.A., Reidpath, D.D., Oduro, A.R. & Allotey, P. (2018). Male involvement in maternal health: perspectives of opinion leaders. *BMC Pregnancy and Childbirth, 18: 3; 1-10.*

Adeyemo, F.O., Oyadiran, G.O., Ijedima, M.O., Akinlabi, B.O. & Adewale, A.J. (2014). Perception of pregnant women towards midwives: attitude and practice during child delivery in health institutions in Ogbomoso, South West, Nigeria. *Epidemiology Biostatistics and Public Health 11:2: e9837-1-e9837-7.* *https://ebph.it/article/viewFile/8937/8666. Accessed 16/04/17.*

Agger, B. (1991). Critical theory, poststructuralism, postmodernism: The sociological relevance. *Annual Reviews Sociology, 17;105-31.*

Ahmed, S., Li, Q., Liu, L. & Tsui, A.O. (2012). Maternal deaths averted by contraceptive use: An analysis of 172 countries. *The Lancet, 380 :987;111-125.*

Aktar, S. (2012). Health Care Seeking Behavior for Safe Motherhood: Findings from Rural Bangladesh. *Bangladesh. e-Journal of Sociology, 9:2;57-70.* *https://pdfs.semanticscholar.org/f0f0/b5417073a26299c425f97f064a9b25db1cae.pdf. Accessed 1/02/16.*

Alabi, A., O'Mahony, D., Wright, G. & Ntsaba, M.J. (2015). Why are babies born before arrival at health facilities in King Sabata Dalindyebo Local Municipality, Eastern Cape, South Africa? A qualitative study. *African Journal of Primary Health Care Family Medicine 2015, 7: 1;1-9.*

Al-Ghamdi, S., Aldossari, K., Al-Zahrani, J., Al-Shaalan, F., Al-Sharif, S., Al-Khurayji, H. & Al-Swayeh, A. (2017). Prevalence, knowledge and attitudes toward herbal medication use by Saudi women in the central region during pregnancy, during labour and after delivery. *BMC Complementary and Alternative Medicine, 17:196;1-9.*

Al-Mujtaba, M., Cornelius, L.J., Galadancia, H., Erekaha, S., Okundaye, J.N., Adeyemi, O.A. & Sam-Agudu, N.A. (2016). Evaluating Religious Influences on the Utilization of Maternal Health Services among Muslim and Christian Women in North-Central Nigeria. *Hindawi Publishing Corporation BioMed Research International 2016,1-9.* Article ID 3645415, http://dx.doi.org/10.1155/2016/3645415. Accessed 16/04/18

Anchang-Kimbi, J.K., Achidi, E.A., Apinjor, T.O., Mugri, R.N., Chi, H.F., Tata, R.B., Nkeguom, B., Mendimi, J.M.N., Svrremark-Ekstrom. & Troy-Blomberg. (2014). Antenatal care visit attendance, intermittent preventive treatment (IPTp) and malaria parasitaemia at delivery. *Malaria Journal 13:162;1-9*

Armstrong, A. & Banks, S. with Henfrey, T. (2011). *Co-inquiry and related Participatory and Action Approaches to Community-Based Research*, Durham University. Beacons for Public Management.

Ashwinkumar, U.M. & Anandakumar, K.R. (2010). Ethical and Legal Issues for Medical Data Mining. *International Journal of Computer Applications (0975-8887),1:28;7-9.*

August, F., Pembe, A.B., Kayombo, E., Mbekenga, E.C., Axemo, P. & Darj, E. (2015). Birth preparedness and complication readiness a qualitative study among community members in rural Tanzania. *Global Health Action 2015, 8;1-12. 26922* - http://dx.doi.org/10.3402/gha.v8.26922.

Austin, A., Gutema, H., Belizama, M., Colaci, D.S., Kendall, T., Tebeka, M., Hailemariam, M., Bekele, D., Tadesse, L., Berhane, Y. & Langer, A. (2015). Barriers to providing emergency obstetric care in Addis Ababa, Ethiopia: Healthcare providers' perspectives on training, referrals and supervision, a mixed methods study. *BMC Pregnancy and Childbirth 2015, 15:74;1-10.*

Ayele, D.Z., Belayihun, B., Teji, K. & Ayana, D.A. (2014). Factors Affecting Utilization of Maternal Health Care Services in Kombolcha District, Eastern Hararghe Zone, Oromia Regional State, Eastern Ethiopia. *Hindawi Publishing Corporation International Scholarly Research Notices, 2014*;1-7. Article ID 917058.

Aziato, L. & Omenyo, C.N. (2018). Initiation of traditional birth attendants and their traditional and spiritual practice during pregnancy and childbirth in Ghana. *BMC Pregnancy and Childbirth, 18:64;1-10.*

Banda, C.L. (2013). *Barriers to utilisation of focused antenatal care among pregnant women in Ntchisi district in Malawi.* Master's Thesis. University of Tampere.

Bedford, J., Gandhi, M., Girma, A. & Admassu, M. (2012). 'A normal delivery takes place at home.': a qualitative study of the location of the childbirth in rural Ethiopia. *Maternal Child Health Journal, LLC;1-10.* Springer Science + Business Media.

Belachew, T., Ayanos Taye, A. & Belachew, T. (2016). Postnatal Care Service Utilization and Associated Factors among Mothers in Lemo Woreda, Ethiopia. *Journal of Women's Health Care, 5:318;1-7.*

Berg, B.L. (2001). *Qualitative Research for the Social Sciences*. 4th Edition. Boston. Allyn and Bacon.

Berger, G. & Peerson, A. (2009). Giving your Emirate woman a voice: Participatory action research on physical activity. *Health and Place 15 (2009): 117-124.*
Beitat, K. (2015). *Trust and incidents: The dynamic of interpersonal trust between patients and practitioners*. Germany. Springer.

Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods and Practices.* 2nd Edition. South Florida.Textbook Collection Book 3.

Bhattacherjee., S, Datta., S, Saha., J.B & Chakraborty., M (2013) Maternal Health Care Services Utilization in Tea Gardens of Darjeeling, India. *Journal of Basic and Clinical Reproductive Sciences, 2: 2;77-84.*

Bhimani, N.R., Vacchani, P.V. & Kartha, G.P. (2016). Utilization pattern of antenatal health care services among married women of reproductive age group in the rural area of Surendranagar district, Gujarat, India: a community based cross sectional study. *International Journal of Research in Medical Sciences, 4:1;252-261*.

Bianchi, C.M., Huneau, J.F., Le Goff, G., Verger, E.O., Mariotti, F. & Gurviez, P. (2016). Concerns, attitudes, beliefs and information seeking practices with respect to nutrition-related issues: A qualitative study in French pregnant women. *BMC Pregnancy Childbirth, 16: 306; 1-14.*

Bocoum, F.Y., Kouanda, S. & Zarowsky, C. (2014). Barriers to antenatal syphilis screening in Burkina Faso. *Pan African medical Journal 2014,17 (Supp 1):12; 1-5.*

Bohren, M.A., Vogel, J.P., Hunter, E.C., Lutsiv, O., Makh, S.K., Souza, J.P., Aguiar, C., Coneglian, F.S., Diniz, A, L. A., Tuncalp, O., Javadi, D., Oladapo, O.T., Khosla, R., Hindin, M.J. & Gulmezoglu, A, M. (2014). The mistreatment of women during childbirth in health facilities globally: A mixed-methods systematic review. *PLOS Medicine, 12 :6; 1-32*.

Boller, C., Wyss, K., Mtasiwa, D., Tanner, M. (2003). Quality and comparison of antenatal care in public and private providers in the United Republic of Tanzania. Bull World Health Organ 2003, 81:2;116–22.

Bolton, R.E. (2014). *A comparison of a Habermas- inspired approach and economists' approaches to social capital.* North American Regional Science Conference Version. http://web.williams.edu/Economics/papers/Habermas.pdf.

Bowling, A. (2014). *Research Methods in Health: Investigating Health and Health Services*. 4th Edition. England. McGraw Hill Open University Press.

Brown, G.W. (1982). Standard deviation, error: Which standard deviation should we use? *The American Journal of Diseases in Children, 136;937-941*.

Browne, A.J. (2000). The potential contributions of critical social theory in Nursing Science. *Canadian Journal of Nursing, 32:2;35-55*.

Burazeri, G. & Kragelj, L.Z. (2013*). Health: Systems – Lifestyle – Policies: A Handbook for Teachers, Researchers and Health Professionals* (2nd edition) Volume I. Germany. Jacobs Verlag.

Burns, A. (1999). *Collaborative action research for English Language teachers*. United Kingdom. Cambridge University Press.

Burns, N. & Groove, S. (2009). *The practice of nursing research: Appraisal, synthesis and generation of evidence.* 6th Edition. St. Louis. Saunders Elsevier.

Burrows, S., Holcombe, S.J., Dube, J., Carter, D. & Smith, K. (2017). Midwives' and patients' perspectives on disrespect and abuse during labour and delivery care in Ethiopia: a qualitative study*. BMC Pregnancy and Childbirth, 17:263; 1-14*.

Bwalya, P., Kolala, P., Mzyopa, E., Mofya, B. & Ngoma, C. M. (2015). Perceptions, beliefs and attitudes of expectant mothers towards male midwives conducting deliveries in health institutions in Zambia. *International Research Journal of Public and Environmental Journal, 2 :4; 43-48*.

Byrne., L. Fakoya., A & Harding., K (2011) HIV in pregnancy: an international perspective. *The Obstetrician & Gynaecologist 2012, 14;17–24*.

Castellanet, C. & Jordan, C.F. (2002). *PAR in Natural Resources Management: A Critique of the Method Based on Five Years' Experience in the Transamazonica Region of Brazil*. United Kingdom. Taylor & Francis.

CCORE, UNICEF. & M-consultating Group. (2011). Apostolic Religion, Health and Utilization of Maternal and Child Health Services in Zimbabwe.

Chama-Chiliba, C.M. & Koch, S.F. (2013). Utilization of focused antenatal care in Zambia: examining individual- and community-level factors using a multilevel analysis. *Health Policy and Planning 2015, 30;78–87.*

Chandhiok, N., Dhillon, B.S., Kambo, A. & Saxena, N.C. (2006). Determinants of antenatal utilization in rural areas of India: A cross-sectional study from 28 districts (An ICMR task force study). *The Journal of Obstetrics and Gynaecology of India ,56 :1; 47-52.*

Chapman, S.J., Glasbey, J.C.D., Khatri, C., Kelly, M., Nepogodiev, D., Bhangu, A. & Fitzgerald, J.D.F. (2018). Promoting research and audit at medical school: evaluating the educational impact of participation in a student-led national collaborative study. *BMC Medical Education, 15:47; 1-11.*

Chea, S.K., Mwangi, T.W., Ndirangu, K.K., Abdullahi, O.A., Munywoki, P.K., Abubakar, A. & Hassan, A.S. (2018). Prevalence and correlates of home delivery amongst HIV infected women attending care at a rural public health facility in Coastal Kenya. *PLOS ONE, 13 :3;1-14.*

Che Chi, P., Bulage, P., Urdal, H. & Sundby, J. (2015). A qualitative study exploring the determinants of maternal health services uptake in post-conflict Burundi and Northern Uganda. *Bio Medical Central Pregnancy and Child birth, 15:18;1-14.*

Chesney, M.D (2015). *Qualitative designs and methods in nursing*. New York. Springer Publishing Company.

Choguya, N.Z. (2014). Traditional birth attendants and policy ambivalence in Zimbabwe. *Journal of anthropology, 2014;1-14. Hindawi Publishing Corporation.*

Chomat, A. M., Solomons, N. W., Montenegro, G., Crowley, C. & Bermuda, O.I. (2014). Maternal health and health seekinf behaviours among indigenous Mam mothers from Quetzaltenango, Guatemala. *Rev Panam Salud Publica 2004,35 :2;113-20.*

Claudio, L., Gilmore, J., Roy, M. & Brenner, B. (2018). Communicating environmental exposure results and health information in a community-based participatory research study. *BMC Public Health; 18:784: 1-8.*

Cohen., P, Morgan., J & Pollack., M (1992) *Intentions in Communication*. Cambridge. MIT Press.

Compaore, A., Gies, S., Brabin, B., Tinto, H. & Brabin, L. (2018). Community approval required for periconceptional adolescent adherence to weekly iron and/ or folic acid supplementation: A qualitative study in rural Burkina Faso. *Reproductive Health, 15:48; 1-8*.

Corbetta, P. (2003). *Social Research: Theory, Methods and Techniques*. London. SAGE Publications.

Cornwall, A. & Jewkes, R. (1995). What is Participatory Research? *Social Science Medical, 4 :12; 1667-1676*.

Creswell, J.W. (2012). *Educational Research: Planning, conducting and evaluating quantitative and qualitative research.* 4th Edition. Boston. Pearson.

Cumber, S.N., Diale, D.C., Stanly, E.M. (2016). Importance of antenatal care services to pregnant womenat the Buea Regional Hospital Cameroon*. Journal of Family Medicineand Health Care, 2:4;23-29.*

Dahiru., T & Oche., O.M (2015). Determinants of antenatal care, institutional delivery and postnatal care services utilization in Nigeria. *Pan African Medical Journal 2015, 21:321;1-17.*

d' Aigdor, E., Wohlmuth, H., Asfaw, Z. & Awas, T. (2014). The current status of knowledge of herbal medicine and medicinal plants in Fiche, Ethiopia*. Journal of Ethnobiology Ethnomedicine, 10:38; 1-33.*

Das, S., Alcock, G., Azad, K., Kuddus, A., Manandhar, D.S., Shresta, N.N., Rath, S., More, N.S., Saville., N., Houweling, T.A.J. & Osrin, D. (2016). Institutional delivery in public and private sectors in South Asia: A comparative analysis of perspective data from four demographic surveillance sites. *Bio Medical Central Pregnancy and Childbirth, 16:273;1-12.*

Dassah, E.T., Sarkodie, Y.A. & Mayaud, P. (2016). Performance of syphilis sentinel surveillance in the context of endemic treponematoses: experience from Ghana. *BMC Infectious diseases, 16:745;1-6*.

Da Silva, R.B., Contandriopoulos, A.P, Pineault & Tousignant, P. (2011). A global approach to evaluation of health services utilisation: Concepts and measures. *Healthcare Policy, 6:4;1-12.*

Dawson, C. (2007). Practical Research Methods: A User- Friendly Guide to Mastering Research. United Kingdom. How To Books Ltd.

Deo, K.K., Paudel, Y.R., Khatri, R.B., Bhaskar, R.K., Paudel, R., Mehata, S. & Wagle, R.R. (2015). Barriers to utilization of antenatal care services in eastern Nepal. *Front Public Health, 3:197; e106-e117.*

Dieronitou, I. (2014). The ontological and epistemological foundations of qualitative and quantitative approaches to research: With reference to content and discourse analysis of textbooks. *International Journal of Economics, Commerce and Management, II:10;1-17.*

Denzin, N.K. & Lincoln, Y.S. (2005). *The SAGE Handbook of Qualitative Research*. 3rd Edition. London. SAGE Publications.

DFID (2008). UK Government maternal health strategy reducing maternal deaths: evidence and action. Third progress report. South Asia Division. Pan Africa Strategy Department.https://reliefweb.int/sites/reliefweb.int/files/resources/49CDBEF3A23ES5F85257479005F1838-Full-Report.pdf. Accessed 1.07.15.

Dinh, T.H., Delaney, K.P., Goga, A., Jackson, D., Lombard, C., Woldesenbet, S., Mogashoa, M., Pillay, Y. & Shaffer, N. (2015). Impact of maternal HIV seroconversion during pregnancy on early mother to child transmission of HIV (MTCT) measured at 4-8 weeks postpartum in South Africa 2011-2012: A national population-based evaluation. *Plos ONE, 10: 5; 1-17.*

Doku, D.T., Zankawah, M.M. & Adu-Gyamfi, A.B. (2016). Factors influencing dropout rate of intermittent preventive treatment of malaria during pregnancy. *Bio Medical Central Resident Notes, 9:460; 1-7.*

De-Regil, L.M., Fernandez-Gaxioa, A.C., Dowswell, T. & Pena-Rosas, J.P. (2015). Effects and safety of periconceptional folate supplementation for preventing birth defects. *Cochrane Database Systemic Review, 14:12; 1-135*.

Dodzo, M.K., Mhloyi, M., Moyo, S. & Dodzo-Masawi, M. (2016). Praying until death: Apostolicism, delays and maternal mortality in Zimbabwe. *Plos One, 11: 8; 1-20.*

Domingues, R.M., Swarcwald, C.L., Souza Junior, P.R. & Leal, M.C. (2014). Prevalence of syphilis in pregnancy and prenatal syphilis testing in Brazil: birth in Brazil study. *Revista de saude Publica, 48 :5;766-74*.

Dutamo, Z., Assefa, N. & Egata, G. (2015). Maternal health care use among married women in Hossaina, Ethiopia. *BMC Health Services Research, 15:365;1-9*.

Eaton, J., W, Rehle, T.M., Jooste., R.N, Kim, A.A., Mahy, M. & Hallett, T.B. (2014). Recent HIV prevalence trends among pregnant women and all women in sub-Saharan Africa: implications for HIV estimates. *AIDS,28 (Suppl 4);1-8*.

EDLIZ 2015: 7th Essential medicines list and standard treatment guidelines for Zimbabwe. Harare. National medicine and therapeutics policy advisory committee.

EGPAF (2011). *Factors influencing antenatal care and reproductive health seeking behaviors in Zimbabwe: Literature review synthesis*. The Children's Investment Fund Foundation. Zimbabwe.

Elias, M., Mmbaga, E.J., Mohamed, A.A. & Kishimba, R.S. (2017). Male partner involvement in the prevention of mother to child transmission of HIV infection in Mwanza Region, Tanzania. *Pan African Medical Journal, 27:90; 1-9.*

Ellis, P. (2010). *Understanding research for Nursing students*. British Cataloguing Publication Data. London.

Elmusharaf, K., Bryne, E. & O'Donovan, D. (2015). Strategies to increase demand for maternal health services in resource-limited settings: challenges to be addressed. *BMC Public Health, 15:870; 1-10*.

EP-Nuffic. (2015). The Zimbabwean education system described and compared with the Dutch system. EP-Nuffic. 1st Edition. Version 1. https://www.nuffic.nl/en/publications/find-a-publication/education-system-zimbabwe.pdf. Accessed 1/04/18.

Ergano, K., Getachew. M., Seyum.D and Negash. K (2012) Determinants of community based maternal health care service utilisation in South Omo pastoral areas of Ethopia. *Journal of Medical and Medicine Sciences, 3 :2; 112-121.*

Evangeli, M., Pady, K. & Wroe, A.L. (2015). Which Psychological Factors are Related to HIV Testing? A Quantitative Systematic Review of Global Studies. *AIDS Behaviour, 2016: 20; 880–918.*

Exavery, A., Kante, A.M., Njozi, M., Tani, K., Doctor, H.V., Hingora, A. & Philips, J.F. (2014). Access to institutional delivery care and reasons for home delivery in three districts of Tanzania. *International Journal of Equity Health, 13:48: 13-48*.

Faeth., M.A. (2004). Power, authority and influence: A comparative study of behavioural influence tactics used by lay and ordained leaders in the Episcopal Church. A dissertation submitted to the Faculty of the Virginia Polytechnic Institute and State University in partial fulfilment of requirements for the degree of Doctor of Philosophy.in Human Development. Virginia.

Ferreira, J.C. & Patiro, C.M. (2015). What does p value really mean? *Journal of Bras Pneumol, 41:5; 485-485.*

Ferguson, P.B. (1999). Developing a research culture in a Polytechnic: an action research case study. A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy at the University of Waikato. http://fergs.org/wp-content/uploads/2012/01/PipPhD.pdf. Accessed 4/04/17.

Flick, U. (2009). *An Introduction to Qualitative Research*. 4th Edition. California. SAGE Publications Ltd.

Folashade, B., Okeshola, I. & Sadiq, T. (2013). Determinants of home delivery among Hausa in Kaduma South local government area of Kaduna State, Nigeria. American *International Journal of Contemporary Research, 3 :5; 78-85.*

Friesen, N. In Fee, S.B. & Belland, B.R. eds (2012). *The role of criticism in understanding problem solving, exploration in the learning sciences, instructional systems and performances*. New York. Springer Science + Business Media.

Fui, L.Y., Khin, E.W.S. & Ying, C.W. (2011). The epistemology assumptions of critical theory for Social Science research. *International Journal of Humanities and Social Science, 1 :4;129.*

Ganle, J.K. & Dary, I. (2015). ‘What men don’t know can hurt women’s health’: A qualitative study of the barriers to and opportunities for men’s involvement in maternal healthcare in Ghana. *BMC Reproductive Health, 12:93;1-13.*

Gardiner, P., Jarret, K., Filippelli, A., Pecci, C., Mauch, M. & Jack, B. (2013). Herbs use, vitamin use and diet in low income postpartum women. *Journal of Midwifery Women’s Health, 58: 2; 150-157.*

Geuss, R. (1981). *The idea of a critical theory: Habermas and the Frankfurt School*. Cambridge. Cambridge University Press.

George, A.S., Mehra, V., Scott, K. & Sriram, V. (2015). Community Participation in Health Systems Research: A Systematic Review Assessing the State of Research, the Nature of Interventions Involved and the Features of Engagement with Communities. *PLOS ONE, 10:10;1-6.*

Gidey, G., Hailu, B., Nigus, K, Hailu, T., G/her, W. & Gerensea. (2017). Timing of first focused antenatal care booking and associated factors among pregnant mothers who attend antenatal care in Central Zone, Tigray, Ethiopia. *BMC Research Notes, 10:608;1-6.*

Goold, S.D. (2002). Trust, distrust and worthiness: Lessons from the field. Journal of *General Internal Medicine,17:1;79-81.*

Gore, O.T., Muza. C & Mukanangana, F. (2014). Barriers and motivators to early utilization of antenatal care services in Chipinge District in Zimbabwe: A qualitative study. *Global Journal of Biology, Agriculture & Health Sciences, 3:4;116-121.*

Gourlay, A., Birdthistle, I., Mburu, G., Lorpenda, K. & Wringe, A. (2013). Barriers and facilitating factors to the uptake of antiretroviral drugs for prevention of mother-to-child transmission of HIV in sub-Saharan Africa: a systematic review. *Journal of the International AIDS Society, 16:18588;1-21.*

Graham, I, D., Kothari, A., McChutcheon, C. & Integrated Knowledge Translation Research Network Project Leads. (2018). Moving Knowledge into action for more effective practice, programmes and policy: protocol for research programme on integrated knowledge translation. *Implementation Science, 13:22;1-15.*

Green, J. & Thorogood, N. (2004). *Qualitative Methods for Health Research*. 3rd Edition. London. SAGE.

Greenwood, D.J. & Levin, M, (2007). *Introduction to Action Research: Social Research for Social Change*. 2nd Edition. London. SAGE Publications.

Gross, K., Alba, S., Glass, T.R., Schellenberg, J.R. & Obrist, B. (2012). Timing of antenatal care for adolescent and adult pregnant women in south-eastern Tanzania. *BMC Pregnancy and Childbirth, 12 :16;1-12.*

Gruber, C. W. & O'Brien, M. (2011). Uterotonic Plants and their Bioactive Constituents. *Planta Medicine, 77:3;207–220.*

Guba, E. G., & Lincoln, Y.S. (1994). *Competing paradigms in qualitative research.* In Denzin, N.K. & Lincoln, Y.S. (Eds.). Handbook of qualitative research. Thousand Oaks. USA, SAGE Publications Inc.

Gunaratne, S.A. (2006). Public sphere and communicative rationality: Interrogating Habermas's Eurocentrism. Association for education in journalism and mass communication. *Journalism & communication monographs, 8:2;1-10.*

Habermas, J. (1971). '*Knowledge and human interests: a general perspective.*' In Knowledge and Human interests trans by Shapiro, J.J. (1971) pp 301-17. Boston. Beacon Press.

Habermas, J. (1973). *Theory and Practice*. Translated by Viertel, J. Boston. Beacon Press.

Habermas, J. (1974). *Theory and practice* (abridged 4th ed.). Viertel, J. (Trans.). Boston.: Beacon.

Habermas, J. (1984). *The Theory of Communicative Action. Volume 1. Reason and the rationalization of Society.* Translated by McCarty, T. Bolton. Beacon Press.

Habermas, J. (1988). *The Theory of Communicative Action*. Volume II. Boston. Beacon Press.

Hagos, S., Shaweno, D., Assegid, M., Mekonnen, A, Afework, M.F. & Ahmed, S. (2014). Utlisation of institutional delivery service at Wukro and Butajera districts in the Northern and South-Central Ethiopia. *BMC Pregnancy and Childbirth, 14:178;1-11.*

Henry, E.G., Semrau, K., Hamer, D.H., Vian, T., Nambao, M., Mataka, K. & Scot, N. (2017). The influences of quality maternity waiting homes on utilisation of facilities for delivery in rural Zambia. *Reproductive Health, 14:68;1-10.*

Heron, J. & Reason, P. (2001). The Practice of Cooperative Inquiry: Research with Rather than one People. www.peterreason.eu/Papers/Handbook-Co-operative-Inquiry.pdf. Accessed 3/04/17.

Herr, K. & Anderson, G.L. (2005). *The action research dissertation: A guide for students and Faculties.* London. SAGE Publication.

Horkheimer, M., Fromm, E., Lowenthal, L., Marcuse, H., Pollock, F., Adorno, T.W., Habermas, J., Kracauer, S. & Benjamin, W. (1989*). Critical theory and a society: A reader*. New York. Routledge.

Ho, R.T.H., Chan, C.K.P., Lo, P.H.Y., Wong, P.H., Chan, C.L.W., Leung, P.P.Y. & Chen, E.Y.H. (2016). Understandings of spirituality and its role in illness recovery in persons with schizophrenia and mental health professionals: a qualitative study. *BMC Psychiatry,16:86;1-11.*

Hogg, M. & Vaughan, G. (2005). *Social Psychology*. 4th Edition. London. Prenctice –Hall.

Hove, I., Siziya, S., Katito, C. & Tshimanga, M. (1999). Prevalence and associated factors for non-utilisation of postnatal care services: Population- based study in Kuwadzana peri-urban area, Zvimba district of Mashonaland West Province, Zimbabwe. *African Journal of Reproductive Health, 3: 2 ;25-32.*

Hoskins, C.N. & Mariano, C. (2004). *Research in Nursing and Health: Understanding and Using Quantitative and Qualitative Methods*. 2nd Edition. New York. Springer Publishing Company.

How, A. (2003). *Critical Theory*. New York. Pelgrave MacMillan.

Huang, Y. & Mathers, N.J. (2010). A comparative study of traditional postpartum practices and rituals in the UK AND Taiwan. *Diversity in Health and Care, 7;239-47.*

Ibiebele, I., Coory, M., Smith, G.C.S., Boyle, F.M., Vlack, S., Middleton, Y.R. & Flenady, V. (2016). Gestational age specific stillbirth risk among indigenous and non-indigenous women in Queensland, Australia: a population-based study. *BMC Pregnancy and childbirth, 16:159;1-8.*

ICM (2010). Global standards for midwifery education. ICM Strengthening midwifery globally. https://www.internationalmidwives.org.

Israel, B.A., Eng, E., Schulz, A.J. & Parker, E.A. (2005). *Methods in Community Based Participatory Research for Health*. San Francisco. B-Jossey. Bass.

Izudi, J., Amongin, D. (2015). Use of early postnatal care among postpartum women in Eastern Uganda. *International Journal of Gynecology and Obstetrics 2015,129; 161-164.*

Jackman, A.R. (2016). Maternal Positioning in the Second Stage of Labor and Incidence of Spontaneous Perineal Trauma: A Systematic Review with Meta-Analysis of Randomized

Controlled Trials. Undergraduate Honours Theses. 1162. https://scholar.colorado.edu/cgi/viewcontent.cgi?article=2257&context=honr_theses. Accessed 12/05/18.

Jat, T.R., Ng, N. & Sebastain, M.S. (2011). Factors affecting the use of maternal health services in Madhya Pradesh state of India: a multilevel analysis. *International Journal of equity in health, 10:59;1-12.*

Joshi, P., Mahalingam, G. & Sorte, D.Y. (2016). Factors influencing utilization of maternal and child health services among the postnatal mothers in hilly region. *International Journal of Research in Medical Sciences, 4:6; 2170-2176.*

Judd, D. (2003). *Critical realism and composition theory*. New York. Routledge Taylor & Francis Group.

Jundt, K., Peschers, U. & Kentenich, H. (2015). The investigation and treatment of female pelvic floor dysfunction. *Deutsches Ärzteblatt International, 112; 564–74.*

Kalisa, R. & Malande, O.O. (2016). Birth preparedness, complication readiness and male partner involvement for obstetric emergencies in rural Rwanda. *Pan African Medical Journal, 25:91;1-7.*

Kalulanga, L.I., Sundby, J., Malata, A. & Chirwa, E. (2011). Striving to promote male involvement in maternal health care in rural and urban settings in Malawi - A qualitative study. *Reproductive Health 2011, 8:36;1-12*.

Kalulanga, L.I., Sundby, J., Malata, A. & Chirwa, E. (2012). Male involvement in maternity care in Malawi. African Journal of *Reproductive Health 201, 16:1;145-157.* Accessed 16/01/18.

Kawungezi, P.C., AkiiBua, D., Aleni, C., Chitayi, M., Niwaha, A., Kazibwe, A., Sunya, E., Mumbere, E.W., Mutesi, C., Tukei, C., Kasangaki, A. & Nalabulwa, S. (2015). Attendance and utilisation of antenatal care (ANC) services: multi-centre study in upcountry area of Uganda. *Open Journal of Preventive Medicine, 5;132-142.*

Kea, A.Z., Tulloch, O., Datiko, D.G., Theobald, S. & Kok, M.C. (2018). Exploring benefits to the use of formal maternity health services and priority areas of action in Sidama zone, Southern Ethiopia. *BMC Pregnancy and Childbirth, 18:96*;1-12.

Kebebe, E., Medhani, G., Dawit, S. & Kassahun, N. (2012). Determinants of community based maternal healthcare utilization in South Omo pastoral areas of Ethiopia. *Journal of Medicine and Medical Sciences, 3 :2;112-121.*

Kemmis, S. & McTaggart, R. (2005). *Participatory action research: Communicative action and the public sphere*. In Denzin, N.K. & Lincoln, Y.S. (eds.). The Sage handbook of qualitative research. Thousand Oaks, CA.: Sage Publications Ltd.

Kemmis, S. & McTaggart, R. (2007). PAR: Communicative Action and the Public Sphere in Denzin, N & Lincoln, Y (Eds), *The Sage handbook of qualitative research.* 3rd Edition. Thousand Oaks. CA. Sage.

Kemmis, S., McTaggart, R. & Nixon, R. (2014). *The Action Research Planner: Doing Critical Participatory Action Research*. Australia. Springer.

Kennedy, D.A., Lupattelli, A., Nordeng, H. (2016). Safety classification of herbal medicines used in pregnancy in a multinational study. *BMC Complementary and Alternative Medicine, 16:102;1-9.*

Kesterton, A. J., Cleland, J., Sloggett, A. & Ronsmans, C. (2010). Institutional delivery in rural India: The relative importance of accessibility and economic status. *Bio Medical Central Pregnancy & Childbirth, 10:30;1-9.*

Khan, C. & Chovanec, D.M. (2010). Is PAR relevant in the Canadian workplace? *Journal of contemporary Issues in education, 2010, 5 :1;34-44.*

Khanal, V., Adhikari, M., Karkee, R. & Gavidia, T. (2014). Factors associated with utilization of postnatal care services among the mothers of Nepal: analysis of the Nepal Demographic and Health Survey 2011. *Bio Medical Central Women's Health, 14:19;1-8.*

Kigenyi, O., Tefera, G.B., Nabiwemba, E. & Orach, C.G. (2013). Quality of intrapartum at Mulago national referral hospital, Uganda: clients' perspective. *BMC Pregnancy & Childbirth, 13:162;1-8.*

Kim, I.J, Kim, S.H. & Sohn, S.K. (2017). Societal perceptions of male nurses in South Korea: A Q-methodological study*. Japan Journal of Nursing Science, 1;219-230.*

Kindon, S., Pain, R. & Kesby, M. (2007). *Participatory action research approaches and methods: Connecting people participation and place*. New York. Routledge Taylor & Francis.

King, C.S. (2016). *Critical Cultural Approaches to Gender and Sex*. Oxford Research Encyclopedia of Communication. USA. Oxford University Press.

Koch, T. & Kralik, D. (2006). *Participatory Action Research in Health Care*. Australia. Blackmail Publishing.

Krauss, S.T. (2005). Research paradigms and meaning: A primer. *Qualitative Report, 4:10; 758-780.*

Kutsira, J. (2013). A gendered analysis of the healing practices of the Johane Marange Apostolic Church in Glenview, Zimbabwe and their effect on women during pregnancy. A thesis submitted in partial fulfilment for master's in theology (Gender and Religion). Pietermaritzburg. University of Kwazulu-Natal.

Kyei, N. A. N., Chansa, C. & Gabrysch, S. (2012). Quality of antenatal care in Zambia: a national assessment. *BMC Pregnancy & Childbirth, 12:151*;1-11.

Lacy, N.L., Paulman, A., Reuter, M.D. & Lovejoy, B. (2004). Why We Don't Come: Patient Perceptions on No-Shows. *Annals of Family Medicine, 2:6; 541-545*.

Lagarde, M. & Palmer, N. (2017). The impact of user fees on health service utilization in low and middle-income countries: How strong is the evidence? http://www.who.int/bulletin/volumes/86/11/07-049197/en/ Accessed 30/11/2017.

Lam, K.K. (2007). Dignity, Respect for Dignity, and Dignity Conserving in Palliative Care. Palliative Medicine Doctors' Meeting. *HKSPM Newsletter; 3: 30;1-6.*

Lamxay, V., de Boer, H.J. & Bjork, L. (2010). Traditions and plant use during pregnancy, childbirth and post partum recovery by the key ethnic group in LAO People's Democratic Republic. *Journal of Ethmobiology and Ethnomedicine, 7:14;1-16.*

Larsen, A., Cheyip, M., Aynalem, G., Dinh, T., Jackson, D., Ngandu, N., Chirinda, W, Mogashoa, M., Kindra, G., Lombard, C. & Goga, A. (2017). Uptake and predictors of early postnatal follow–up care amongst mother–baby pairs in South Africa: Results from three population–based surveys, 2010–2013. *Journal of Global Health, 7:2;1-14.*

Larsson., E.L, Ekstro., A.M, Pariyo., G, Tomson., G, Sarowar., M, Baluka., R, Galiwango., E & Thorson., A.E (2015). Prevention of mother-to-child transmission of HIV in rural Uganda: Modelling effectiveness and impact of scaling-up PMTCT services. *Global Health Action 2015, 8;1-9.*http://dx.doi.org/10.3402/gha.v8.26308. Accessed 3/04/18.

Letamo, G. & Rakgoasi, S.D. (2003). Factors Associated with Non-use of Maternal Health Services in Botswana. *Journal of Health, Population Nutrition, 21:1; 40-47.*

Limenih, M.A., Endale, Z.M., & Dachew, B.A. (2016). Postnatal care services utilization and associated factors among women who gave birth in the last 12 months prior to the study in Debre market town, North Western Ethiopia: A community-based cross-sectional study. *International Journal of Reproductive Medicine, 2016; 1-7.*

Lincoln, Y.S. & Guba, E.G. (1985) In Pandey, S.C. & Patnaik, S. (2014:5746). Establishing reliability and validity in qualitative inquiry: A critical examination. *Jharkhand Journal of Development and Management Studies XISS, Ranchi; 12:1;5743-5753.*

Llyod, M. & Carson, A. (2005). Culture shift: carer empowerment and cooperative inquiry. *Journal of Psychiatry Mental Health Nursing,12 :2;187-191*.

LoBiondo-Wood, G. & Haber, J. (2010). *Nursing research: Methods and critical appraisal for evidence- based practice.* United States of America. Mosby-Elsevier.

Loewenson, R., Kadungure, A. & Shamu, S. (2012). *Assessment of facilitators and barriers to maternal and child health services in four rural and urban districts in Zimbabwe. Collaboration Centre for Operational Research and Evaluation*. Harare. TARSC and CCORE.

Loewenson, R., Laurell, A.C., Hogstedt, C., D'Ambruoso, L. & Shroff, Z. (2014). *Participatory action research in health systems: A methods reader*. Harare. TARSC, AHPSR, WHO and IDCR Canada, EQUINET.

Lopez, J. & Potter, G. (2001). *After Postmodernism: An introduction to critical realism*. London. The Athlone Press.

Lu, C.H., Tang, S, T., Lei, Y.X., Zhang, M.Q., Lin, W.Q., Ding, S.H. & Wang, P.X. (2015). Community-based interventions in hypertensive patients: A comparison of three health education strategies. *BMC Public Health, 15:33*.

Lubbock, L.A. & Stephenson, R.B. (2008). Utilisation of maternal healthcare services in the department of Matagalpa, Nicaragua. *Revista. Panamericana de Salud Publica, 24 :2 ;75-84.*

Lucock, M., Halstead, J., Leach, C., Barkham, M., Tucker, S., Randal, C., Middleton, J., Khan, W., Catlow, H., Waters, E. & Saxon (2015). A mixed-method investigation of patient monitoring and enhanced feedback route practice: Barriers and facilitators. *Psychotherapy Research, 25 :6;633-646.*

Lweramira, J., Safari, J. & Stephen, A. (2015). Utilization of maternal postnatal services among women in selected villages of Bahi District, Tanzania. Current *Research Journal of Social Sciences, 7:4;106-111.*

MacDonald, C. (2012). Understanding Participatory Action Research: A qualitative research methodology option. *Canadian Journal of Action Research, 13:2;34-50.*

Macfarlane, A.J., Blondel, B., Mohangoo, A.D., Cuttini, M., Nijhuis, J., Novak, Z., Olafsdottir, H.S., Zeitlin, J. & The Euro-Peristat Scientific Committee. (2014). Wide differences in mode of delivery within Europe: risk-stratified analysis of aggregated routine data from the Euro-Peristat study. *BJOG 2016,123;559–568. Royal College of Obstetricians and Gynaecologists.*

Machira, K. & Palamuleni, M. (2018). Women's perspectives on quality of maternal health care services in Malawi. *International Journal of Women's Health, 2018: 10;25-34.*

Mackain, S. (2003). A review of health seeking behaviour: problems and prospects. University of Manchester Health Systems Development Programme and DFID. London.http://r4d.dfid.gov.uk/pdf/outputs/healthsysdev-kp/05-03-health-seeking-behaviours.pdf. Accessed 28 October 2014.

McCarthy, T. (1985). *The critical theory of Jurgen Habermas*. London. The MIT Press.

McNiff, J. & Whitehead, J. (2002). *Action research: principles and practice*. 2nd Edition. London.Taylor and Francis Group.

Makumbe, S. (2001). Utilization of postnatal services at St Joseph's clinic in Chishawasha (Zimbabwe). Dissertation for a Master of Arts in Nursing Science. UNISA.

Mlambo, C., Chinamo, C. & Zingwe, T. (2013). An investigation of the causes of maternal mortality in Zimbabwe. *Meditarreanian Journal of Social Sciences, 4 :14;615-620.*

Mandoreba, T. & Mokwena, K. (2016). Factors Associated with Late Antenatal Booking in Harare, Zimbabwe. *Botswana Journal of African Studies, 30:1;131-136.*

Mangeni, J.N., Mwangi, A., Mbugua, S. & Mukthar, V. (2012). Male involvement in maternal health care as a determinant of utilization of skilled birth attendants in Kenya. *East African Medical Journal, 89: 11;372-83*.

Mannava, P., Durrant, K., Fisher, J., Chersich, M. & Luchters, S. (2015). Attitudes and behaviours of maternal health care providers in interaction with clients: a systematic review. *Globalization and Health 2015,11:36.*

Marks, D. & Yardley, L. (2004). *Research methods for clinical and health psychology*. New York. SAGE Publications.

Martin, J.N. & Nakayama, T.K. (2010). *Intercultural communication in contexts*. 5th Edition. Boston. McGraw-Hill Higher Education.

Mash, B. (2013). African Primary Care Research: Participatory Action Research. *African Journal of Primary Health Care Family Medicine, 6 :1;1-5.*

Mash, B. & Meulenberg-Buskens, I. (2001). 'Holding it lightly': the co-operative inquiry group: a method for developing educational materials. *Blackwell Science Ltd. Medical Education, 35; 1108-1114.*

Mason., L, Dellicour., S, Kuile., F.T, Ouma., P, Were., F, Laserson., K & Desai., M. (2015). Barriers and facilitators to antenatal and delivery care in western Kenya: a qualitative study. *BMC Pregnancy and Childbirth, 15:26;1-10*.

Matyukira, S. P. (2014). Knowledge and utilisation of antenatal care services by pregnant women at a clinic in Ekurhuleni. Thesis: University of South Africa, Pretoria,

McClure, E.M., Saleem, S., Goudar, S.S., Moore, J. L., Garces, A., Esamai, F., Patel, A., Chomba, E. et al. (2015). Stillbirth rates in low-middle income countries 2010 - 2013: a population-based, multi-country study from the Global Network. *Reproductive Health 2015, 12 (Supplimentary 2): S7;1-9*.

McIntyre, A. (2008). *PAR, Qualitative Research Methods Series 52*. Los Angeles. A SAGE University Paper Publications.

Mhondoro-Ngezi unpublished annual report (2015. Zimbabwe

Ministry of Health and Child Care. (2016). *Zimbabwe National Adolescent Fertility Study.* Harare. Ministry of Health and Child Care Technical Report.

McKay, M.M., Bell, C.C. & Blake, C.A. In Pequegnat, W at al. (eds.) (2011). *How to write a successful research grant application: A guide for social and behavioural scientists.* New York. USA. Springer Science + Business Media.

McKernan, J. (1996). *A handbook of methods and resources for the reflective practitioner*. 2nd Edition. Abingdon. Routledge.

Mekuria, A.B., Erku, D.A., Gebresillassie, B.M., Birru, E.M., Tizazu, B. & Ahmedin, A. (2017). Prevalence and associated factors of herbal medicine use among pregnant women on antenatal care follow-up at University of Gondar referral and teaching hospital, Ethiopia: a cross-sectional study. *BMC Complementary and Alternative Medicine, 17:86;1-7.*

Mirkovic, K.R., Lathrop, E., Hulland, E.N., Jean-Loui, R., Lauture, D., D'Alexis, G, D., Hanzel, E. & Grand-Pierre. (2017). Quality and uptake of antenatal and postnatal care in Haiti. *BMC Pregnancy and Childbirth, 17:52.*

Mitiku, I., Addissie, A. & Molla, M. (2017). Perceptions and experiences of pregnant women about routine HIV testing and counselling in Ghimbi town, Ethiopia: a qualitative study. *BMC Research Notes, 10:101*.

Mlilo-Chaibva, C. (2007) Factors influencing adolescents' utilisation of antenatal services in Bulawayo, Zimbabwe. PhD Thesis. University of South Africa.

Mojekwe, J.N. & Ibekwe, U. (2012). Maternal mortality in Nigeria: Examination of intervention methods. *International Journal of Humanities, 2 :20;135-149*.

Moodley, T., Moodley, D., Sebitloane, M., Maharaj, N., Sartorius, B. (2016). Improved pregnancy outcomes with increasing antiretroviral coverage in South Africa. *BMC Pregnancy and childbirth, 16:35;1-10.*

Morgan, R., Tetui, M., Kananura, R.M., Ekirapa-Kiracho, E. & George, A.S. (2017). Gender dynamics affecting maternal health and health care access and use in Uganda. *Health Policy & Planning, 2017:32; v13-v21.*

Morrow, R.A. & Torres, C.A. (2002). *Reading Freire and Habermas: Critical pedagogy and transformational social change*. Teacher College Press. New York.

Mosqueda-Diaz, A., Vilchez-Barboza, V., Valenzuela-Suazo, S. & Sanhueza-Alvarado, O. (2014). Critical theory and its contribution to the nursing discipline. *Investigacion. Y Educacion en Enfermena, 32:2;356-363*.

Mpofu, E., Dune, T.M., Hallfors, D.D., Mapfumo, J., Mutepfa, M.M. & January, J. (2012). Apostolic faith church organization contexts for health and wellbeing in women and children. *Ethnicity & Health, 16:6; 551-566*.

Mselle, L.T., Moland, K.M., Mvungi, A., Evjen- Olsen, B. & Kohi, T.W. (2013). Why give birth in health facility? Users' and providers' accounts of poor quality of birth care in Tanzinia. *BMC Health Services Research, 13:174;1-12.*

Miltenburg, A.S., Lambermon, F., Hamelink, C. & Meguid, T. (2016). Maternity care and Human Rights: what do women think? *BMC International Health and Human Rights, 16:17;1-10*.

Muchabaiwa, L., Mazambani, D., Chigusiya, L., Bindu, S. & Mudavanhu, V. (2012). Determinants of maternal health care utilization in Zimbabwe. *International Journal of Economic Sciences and Applied Research, 5:2; 145-162.*

Muhammad, J.F., Muhamma, A.K., Aijaz, A., Syeda, T.F. & Kamal, H. (2011). Paradigms and characteristics of a good qualitative research. *World Applied Sciences Journal, 12 :11;2082-2087.*

Munabi-Babigumira, S., Glenton, C., Lewin, S., Fretheim, A. & Nabedere, H. (2017). Factors that influence the provision of antepartum and postnatal care by skilled birth attendants in low and middle-income countries: a qualitative evidence synthesis. *Cochrane Library Autobase Systematic Reviews 2017:11:1-128.*

Mundongo., T.H, Muchanga., S et al (2015). Effectiveness of prevention of mother to child transmission (PMTCT) transmission of HIV infection program in Lumumbashi, Democratic Republic of the Congo. *Archives of medicine, 7:24;1-7*.

Munjanja, S. P. (2007). *Zimbabwe Maternal and Neonatal Mortality Survey*. Harare. Zimbabwe Ministry of Health and Child Care.

Munjial, M., Kaushik, P. & Agnihotri, S. (2009). A comparative analysis of institutional and non-institutional deliveries in a village in Punjab. *Health and Population Perspectives and Issues, 32:3; 131-140.*

Muranda, E. (2014). *Factors influencing women's preference for home births in the Mutare District, Zimbabwe.* Master's in public health dissertation University of South Africa. Pretoria.

Mureyi, D.D., Monera, T.G. & Maponga, C.C. (2012). Prevalence and patterns of prenatal use of traditional medicine among women at selected Harare clinics: a cross-sectional study*. Bio Medical Central, 12:164;1-8.*

Musindo, M., Chideme-Munodawafa, A., Mhlanga, M.& Ndaimana, A. (2016) Delayed first antenatal visit by pregnant women: Correlates in a Zimbabwean peri-urban district. *International Journal of Innovative Research and Development, :7;307-315.*

Muzondo, P. (2012). Rural women's right to maternal health care before, during and after delivery: A focus on women in Romsley resettlement area of Rusape district, Manicaland, Zimbabwe. A dissertation submitted in partial fulfilment of the requirements for a Masters in Women's Law Degree, Southern and Eastern African Regional Centre for Women's Law. University of Zimbabwe.

Nababan, H.Y., Islam, R., Mostari, S., Tariquijaman, M., Sarker, M., Islam, M.T. & Moucheraud, C. (2017). Improving quality of care for maternal and newborn health: a pre-post evaluation of the safe Childbirth Checklist at a hospital in Bangladesh. *BMC Pregnancy Childbirth,17:402;1-10.*

Nakku, J.E.M., Okello, E.S., Kizza, D., Honikman, S., Ssebunnya, J., Ndyanabangi, S., Hanlon, C. & Kigozi, F. (2016). Perinatal mental health care in rural African district, Uganda: a qualitative study of barriers, facilitators and needs. *BMC Health Services Research, 16:295;1-12.*

Nair, M., Yoshida, S., Lambrechts, T., Boscho-Pinto, C., Bose, K., Mason, E.M. & Mathai, M. (2014). Facilitators and barriers to quality of care in maternal, new born and child health: A global situational analysis through metareview. BMJ Open 2014, 4: e004749;1-19. https://bmjopen.bmj.com/content/bmjopen/4/5/e004749.full.pdf. Accessed 16/10/17.

Nasir, A., Korejo, R. & Noorani, K.J. (2007). Child birth in squatting position. *Journal of Pakistan Medical Association, 57:19:19-22.*

Neiburg, P. (2012*). Improving maternal mortality and other aspects of women's health: The United States' global role*. Centre for Strategic and International studies. New York.

Nelson, J.P. (2016). Posterior uterine rupture secondary to use of herbs leading to peritonitis and maternal death in a primigravida following vaginal delivery of a live baby in western Uganda: a case report. *Pan African Medical Journal 2016, 23:81;1-4.*

Ngomane, S. & Mulaudzi, F.M. (2012). Indigenous beliefs and practices that influence the delayed attendance of antenatal clinics by women in the Bohlabelo districts in Limpopo. *South Africa Midwifery, 28:1;30-38.*

Nichols, R.G. & Allen-Brown, V. (1996). Critical theory and educational technology. In Jonassen, D.H. (Ed.), Handbook of research for educational communications and technology (1st ed). New York. Springer.

Nyondo, A.L., Chimwaza, A.F. & Muula, A.S. (2014). Exploring the relevance of male involvement in the prevention of mother to child transmission of HIV services in Blantyre, Malawi. *BMC International Health and Human Rights 2014*, 14:30;1-12.

Oates, B.J. (2002). Co-operative Inquiry: Reflections on Practice. *Electronic Journal of Business Research Methods, 1:1;27-37.*

Obiageli, F.E., Ugochukwa, U.O., Ukegbu, A.U., Chigozie. N.N., Ifeadike. O. & Okezia, O.K. (2014). Perception of quality of maternal healthcare services among women utilising antenatal services in selected primary health facilities in Anambra State, Southeast Nigeria. *Nigeria Medical Journal, 55:2;148-155*.

Ojur, T.A., Ishor, D.G. & Ndom, P.J. (2013). African Cultural Practices and Health Implications for Nigeria Rural Development. *International Review of Management and Business Research, 2:1;176-183.*

Okeshola, F.B. & Sadiq, I.T. (2013). Determinants of Home delivery among Hausa in Kaduna South local Government Area of Kaduna State, Nigeria. *American International Journal of Contemporary Research, 3:5;1-6.*

Okonofua, F., Ogu, R., Agholor, K., Okike, O., Abdus-salam, R., Gana, M., Randawa, A., Abe, E., Adetoye, D. A. & Galadanci, H. (2017). Qualitative assessment of women's satisfaction with maternal health care in referral hospitals in Nigeria. *Reproductive Health 2017, 14:44;1-8.*

Okwaraji, Y.B., Webb, E.L. & Edmond, K.M. (2015). Barriers in physical access to maternal health services in rural Ethiopia. *BMC Health Services Research 2015, 15:493;1-8.*

Olayinka, O.A., Achi, O.T., Amos, A.O. & Chiedu, E.M. (2014). Awareness and barriers to utilization of maternal health care services among reproductive women in Amassoma community, Bayelsa State Onasoga. *International Journal of Nursing and Midwifery, 6 :1;10-15*.

Ononokpono, D.Z. & Odimegwu, C.O. (2014). Determinants of Maternal Health Care Utilization in Nigeria: A multilevel approach. *Pan African Medical Journal 2014,17(Supp 1):2;1-6.*

Oroch, C.G., Otim, G, Aporoman, J.F., Okello, S.A., Odongkara, B. & Komakech, H. (2015). Perceptions, attitudes and use of family planning services in post Gulu district, northern Uganda. *Conflict and Health, 9:24;1-11.*

Osika, J., Altman, D., Ekbladh, L., Kartz, I., Nguyen, H., Williamson, J.R.T. & Tapera, S. (2011). Zimbabwe Health System Assessment 2010. Health Systems 20/20 Project. USAID. https://www.hfgproject.org/wpcontent/uploads/2015/02/Zimbabwe_Health_System_Assessment20101.pdf. Accessed 12/03/17.

Ouendo, E.M., Sossa, J.C., Saizonou, J., Guedegbo, C.C.J., Mongobo, A.V., Mayaki, A.I., & Ouedraigo, T.L. (2015). Determinants of Low ANC Services Utilisation During the First Trimester of Pregnancy in Southern Benin Rural Setting. *Universal Journal Public Health, 3:5;220-228.*

Paina, L., Vadrevu, L., Hanifi, S.M.M.A., Akuze, J., Reider, R., Chan, K.S. & Peters, D.H. (2016). What is the role of community capabilities for maternal health? An exploration of community capabilities as determinants to institutional deliveries in Bangladesh, India, and Uganda. *BMC Health Services Research, 16 (Suppl 7): 621;1-11.*

Pandey, S. & Karki, S. (2014). Socio-economic and demographic determinants of Antenatal Care services utilization in East Nepal. *International Journal of MCH and AIDS, 2:2; 212-219.*

Patton, M.Q. (2002). *Qualitative research and evaluation*. Thousand Oaks, California. SAGE Publications.

Paudel, Y.R., Jha, T. & Mehata, S. (2017). Timing of first antenatal care (ANC) and inequalities in early initiation of ANC in Nepal. *Frontiers in Public Health, 5:242;1-6*.

Pell, C., Menaca., Were, F., Afrah, N.A., Chatio, S., Manda-Taylor, L., Hamal, M.J., Hodgson, A., Tagbor, H., Kalilani, L., Ouma, P. & Pool, R. (2013). Factors affecting antenatal attendances: Results from qualitative studies in Ghana, Kenya and Malawi. *Plos ONE, 8:1; e53747-e53758.*

Peña-Rosas, J.P., De-Regil, L.M., Dowswell, T., & Viteri, F.E. (2014). *Daily oral iron supplementation during pregnancy. The Cochrane Collaboration.* London. John Wiley & Sons Ltd.

Penn-Kekana, L., Pereira, S., Hussein, J., Bontogon, H., Munjanja, S. & Portela, A. (2017). Understanding the implementation of maternity waiting homes in low- and middle-income countries: a qualitative thematic synthesis. *BMC Pregnancy and Childbirth 2017, 17:269;1-12.*

PEPFAR., USAID., MoHCC., OPHID., CCORE., UNICEF. (2014). Exploring the forgotten variable. Engaging, listening and learning from Apostolic birth attendants: An exploratory qualitative study of the role of Apostolic midwives in Mashonaland Central Province, Zimbabwe. *OPHID OR Series 2014: Report 2.* https://www.unicef.org/zimbabwe/OPHIDApostolic_Birth_Attendants_Study_2014_FINAL_Layout.pdf. *Accessed 3/07/18.*

Phiri, S.N., Fylkesnes, K., Ruano, A.L. & Moland, K.M. (2014). 'Born before arrival': user and provider perspectives on health facility childbirths in Kapiri Mposhi district, Zambia. *BMC Pregnancy and Childbirth, 14:323; 1-10.*

Pickles, K., Carter, S.M., Rychetnik, L., McCaffery, K. & Entwistle, V.A. (2017). Primary goals, information-giving and men's understanding: A qualitative study of Australian and UK doctors' varied communication about PSA screening. *Bio Medical Journal Open, 8: e018009;1-13.* https://bmjopen.bmj.com/content/bmjopen/8/1/e018009.full.pdf. *Accessed 3/06/18.*

Plack, M.M (2005). Human Nature and Research Paradigms: Theory Meets Physical Therapy Practice. *The Qualitative Report, 10:2;223-245.*

Pohjolainen, L. (2014). Challenging barriers and misconceptions: Roma maternal health in Ireland. Roma Seminar Series.Dublin. Pavee Point.

Polit, D.F., & Beck, C.T (2003). *Nursing Research: Principles and Methods.* 7th Edition. New York. Lippincott Williams and Wilkins.

Pomerai, K.W. (2011). Determinants of Post Natal Care Uptake in Bikita. Thesis for Master in Public Health. University of Zimbabwe.

Pope, C. & Mays, N. (2006). *Qualitative research in health care*. 3rd Edition. USA. Blackwell Publishing.

Powers, C.B. & Allaman, E. (2012). *How participatory action research can promote social change and help youth development*. United States of America. Born This Way Foundation, Berkman and MacArthur Foundation.

Probandari, A., Arcita, A., Kothijah, K., Poncorini, P. (2017). Barriers to utilisation of postnatal care at village level in Klaten district, central Java Province, Indonesia. *BMC Health Services Research, 17:541;1-9.*

Punch, K.F. (2013). Introduction to social research: Quantitative and qualitative approaches. New York. SAGE Publications.

Pusey, M. (1987). *Jurgen Habermas.* London. Routledge.

Rashid, S. S. (2013). Research paradigms: Researchers' worldviews, theoretical frameworks and study designs. *Arab World English Journal, 4:4;252-264*.

Reason, P. (1994). *Three approaches to participative inquiry*. In Denzin., N.K Lincoln., Y.S (Eds) (1980) Handbook of qualitative research. Thousand Oaks. Sage.

Reason, P. (1999). Integrating Action and Reflection through Cooperative Inquiry. Management Learning. Special Issue: The Action Dimension in Management. *Diverse Approaches to Research, Teaching and Development, 30:2; 207-227.*

Reason, P. & Bradbury, H. (2001). *Handbook of action research: Participative inquiry and practice.* London. SAGE Publications.

Reason, P. & McArdle, K. in Becker, S. & Bryman, A. (2004). *Understanding Research Methods for Social Policy and Practice.* London. The Polity Press.

Republic of South Africa, Department of South Africa. (2007). An animal drawn transportation policy for South Africa. Unpublished.

Reza, H. (2007). Participatory Action Research (PAR): Revisiting the history, concept and ethics. *BRAC University Journal, 4:2; 27-34.*

Riley, C., Dellicour, S., Ouma, P., Kioko, U., Kuile, F.O., Omar, A., Kariuki, S., Buff, A.M., Desai, M. & Gutman, J. (2016). Knowledge and adherence to the national guidelines for malaria case management in pregnancy among healthcare providers and drug outlet dispensers in rural, Western Kenya. *Plos ONE, 11:1;1-18.*

Ritchie, J. & Lewis, J. (eds) (2003). *Qualitative Research Practice.* London. SAGE Publications.

Ritzer, G. (2008). *Modern social critical theory.* 7th Edition. Boston. McGraw Hill.

Rivera, J.O., Loya, A.M. & Ceballos, R. (2013). Use of herbal medicines and implications for conventional drug therapy medical sciences. *Alternative and Integrative Medicine, 2:6;1-6.*

Roderick, R. (1986). *Habermas and the foundations of critical theory.* New York. St. Martin's Press.

Rodriguez, L.F. & Brown, T.M. (2009). From voice to agency: Guiding principles for participatory action research with youth. *New Directions for Youth Development 2009: 123;19-34. New York. Wiley Periodicals INC.*

Ruffinem, C.Z., Sabido, M., Diaz-Bermude., X.P., Lacerda, M., Mabey, D., Peeling, R.W. & Benzaken, A.S. (2015). Point-of-care screening for syphilis and HIV in the borderlands: challenges in implementation in the Brazilian Amazon. *BMC Health Services Research, 15:495;1-10.*

Rutaremwa, G., Wandera, S.O., Jhamba, T., Akiror, D. & Kiconco, A. (2015). Determinants of maternal healthservices utilization in Uganda*. BMC Health Services Research, 15:271;1-8.*

Rwabufigiri, B.N., Mukamurigo, J., Thomson, D.R., Hedt- Gautier, B.L. &Semasaka, J.P.S. (2016). Factors associated with postnatal utilisation in Rwanda: A secondary analysis of 2010 Demographic and Health Survey data. *BMC Pregnancy and Childbirth, 16:122;1-8.*

Saad- Haddad, G., DeJong, J., Terren, N., Restrepo-Mendez, M.C., Perin, J., Vaz, L., Holly, N., Amouzou, A., Barros, A.J.D. & Bryce, J. (2016). Patterns and determinants of antenatal care utilization: analysis of national survey data in seven countdown countries. *Journal of Global Health, 6:1;1-20.*

Sakala, B. & Kazembe, A. (2011) Factors influencing the utilisation of postnatal care at one week and six weeks among mothers at Zombe Central Hospital in Malawi. *Evidence Based Midwifery, 9;113-136*.

Saldana, J. (2010). The coding manual for qualitative researchers. SAGE Publications. London.

Sapkota, S., Kobayashi, T., Kalekashi, M., Baral, G. & Yoshiba, I. (2012). In the Nepalese context, can a husband's attendance during childbirth help his wife feel more in control of labour? *BMC Pregnancy and Childbirth 2012, 12:49;1-10.*

Shah, N., Hossain, N., Shoaib, R., Hussain, A., Gillani, R. & Khan, N.H. (2009). Socio-demographic characteristics and the three delays of maternal mortality. *Journal of the College of Physicians and Surgeons Pakistan, 19:2;95-98.*

Shamaki, M.A., Yew, V.W.C. & Dahiru, M.K. (2017). Analysing barriers to accessing healthcare systems in developing countries: A case of Sokoto-Northen Nigeria. *Meditarrenean Journal of Social Sciences, 8:2;1-8.*

Sam-Agudu, N, A., Llewellyn, J., Cornelius, L.J., Okundaye, J.N., Adeyemi, O.A., Haroun, O.I., Owens, M. W., Adejuyigbe, E., Galadanci, H., Abayomi, J.A., Ibidun, J., Emem, B. & Charurat, M.E. (2014). The impact of mentor mother programme on PMTCT service uptake and retention-in-care at Primary Health Care Facilities in Nigeria: A prospective cohort study (MoMent Nigeria). *Journal of Acquird Immuno Deficiency Syndrome, 67; S132-S138.*

Sandretto, S. (2007). *Discussion paper. Action research for social justice. Teaching and learning initiative.* Crown. New Zealand.

Simkhada, B., Porter, M, A. & Teijlingen, E.R. (2010). The role of mother-in-law in antenatal care decision-making in Nepal: a qualitative study. *BMC Pregnancy and Childbirth, 10:34;1-10.*

Scott, J.P. (2001). Critical social theory: an introduction and critique. *British Journal of Sociology, 29:1;1-21.*

Scotland, J. (2012). Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistomology to the Methodology and Methods of the Scientific, Interpretive and Critical Research Paradigms. *English Language Teaching, 5:9;9-16.*

Seawright, J. (2013). *Multi-Method Social Science: Combining Qualitative and Quantitative Tools*. Illinois. Northwestern University.

Serbanescu, F., Goodberg, H.I., Danel, I., Wuhib, T., Marum, L., Obiero, W., McAuley, J., Aceng, J., Chomba, E., Stupp, P.W. & Conlon, C.M. (2017). Rapid reduction of maternal mortality in Uganda and Zambia through the saving mothers, giving life initiative: results of year 1 evaluation. *BMC Pregnancy and Childbirth, 17:42;1-14*.

Shah, S.R. & Al-Bargi, A. (2013). Research paradigms: researchers' worldviews, theoretical frameworks and study designs. *Arab World English Journal, 4:4;252-264*.

Sharan, B.M. (2009). *Qualitative Research: A Guide to Design and Implementation*. Revised and Expanded from Qualitative Research and Case Study Applications in Education. San Francisco. JOSSEY-BASS A Wiley Print.

Siajabu., M.J. (2009). Home deliveries: factors influencing them and their impact on maternal and infant mortality in Songea rural district. A dissertation submitted in partial fulfillment of the requirements for the degree of Master of Arts in rural development of the Sokoine University of agriculture, Morogoro, Tanzania.

Sialubanje, C., Massar, K., Hamer, D.H. & Ruiter, R.A.C. (2015). Reasons from home delivery and use of traditional birth attendants in rural Zambia: A Qualitative study. *BMC Pregnancy and Childbirth, 15:216;1-12.*

Sialubanje, C., Massar, K., van der Pijl, M.S.G., Kirch, E.M., Hamer, D.H. & Ruiter, R.A.C. (2015). Improving access to facility-based delivery services: Women's beliefs on facilitators and barriers to the utilisation of maternity waiting homes in rural Zambia. *Reproductive Health, 12:61;1-13*.

Sibiya, M.N., Ngxongo, T.S.P. & Bhengu, T.J. (2018). Access and utilisation of antenatal care services in a rural community of eThekwini district in KwaZulu- Natal. *International Journal of Africa Nursing & Sciences, 8;1-7.*

Silverman, D (2004). Qualitative Research: *Theory, Method and Practice*. 2nd Edition. New Delhi. SAGE Publications.

Singh, R.P. (1999). Critical theory of Juegan Habermas: A critique of enlightment rationality. *Indian Philosophical Quarterly, XXVI:3;381-394.*

Smith, E.R., Muhihi, A., Mshamu, S., Sudfeld, C., Noor, R.M., Spiegelman, D., Shapiro, R.L., Masanja, H. & Fawzi, W. (2016). The effect of neonatal Vitamin A supplementation on morbidity and mortality at 12 months: A randomized trial. *International Journal of Epidemiology, 45:6; 2112-2121*.

Sooi, L.K. & Keng, S.L. (2013). Herbal medicines: Women's knowledge and Practice. *Evidence based complementary and alternative medicine 2013;1-10.*

Stanton, C. (2008) Steps towards achieving skilled attendance at birth. *Bull World Health Organisation, 86:4;242.*

Stekelenburg, J., Kyanamina, S., Mukelabai, M., Wollfers, I. & van Roosmalen, J. (2004). Waiting too long: low use of maternal health services in Kalabo, Zambia. *Tropical Medicine and International Health, 9:3;390-398.*

St Michaels Hospital Annual unpublished Report (2015). Harare.

Sudersan, P. (1998). Habermas and critical social theory. *Indian Philosophical Quartely, XXV:11.*

Sushmita, D., Glyn, A., Kishwar, A., Abdul, K., Dharma, S.M., Bhim, P.S., Nirmala, N., Tebekaw, Y., Mashalla, Y.J., & Thupayagale-Tshweneagae, G. (2015). Factors Influencing Women's Preferences for Places to Give Birth in Addis Ababa, Ethiopia. *Obstetrics and Gynecology International 2015;1-7.*

Suzuki, S. (2015). Clinical significance of precipitous labor. *Journal of clinical medicine research,7:3;150-153.*

Taderera, B.H., Hendricks, S. & Pillay, Y. (2016). Health personnel retention strategies in a peri-urban community: an exploratory study on Epworth, Zimbabwe. *Human Resources for Health, 14:17; 1-14.*

Takai, I.D., Dlakwa, H.D., Bukar, M., Audu, B.M. & Kwayabura, A.S. (2015). Factors responsible for under-utilization of postnatal care services in Maiduguri, north-eastern Nigeria. *Sahel Medical Journal, 18:3;109-115.*

Taye, B., Abeje, G. & Mekonen, A. (2015). Factors associated with compliance of prenatal iron folate supplementation among women in Mecha district, Western Amhara: A cross-sectional study. *Pan African Medical Journal, 20:43;1-7.*

Teoh, C.S., Aizul, M.H.I., Suriyani, W.M.W.F., Ang, S.H., Huda, M.Z.N., Azilinl, M.I.N. & Rohana, J. (2013). Herbal ingestion during pregnancy and postpartum period is a cause of concern. *Medical Journal of Malaysia, 68:2;157-160.*

Thaddeus, S. & Maine, D. (1999). Too far to walk: Maternal mortality in context. *Social Science and Medicine, 38:8;1091-1110.*

Swannel, J. (1994). *The Oxford Modern English Dictionary*. Oxford. Clarendon Press.

Titaley, C.R., Hunter, C.L., Dibley, M.J. & Heywood, P. (2010). Why do women still prefer traditional birth attendants and home delivery? A qualitative study on delivery care services in West Java Province, Indonesia. BMC Pregnancy and Childbirth, 10:43;1-14.

Tripathy, J.P., Goel, S. & Kumar, A.M.V. (2016). Measuring and understanding motivation among community health workers in rural health facilities in India-a mixed method study. *BMC Health Services Research, 16:366*;1-10.

Tsawe., M & Susuman., A.S (2014) Determinants of access to the use of maternal health care services in the Eastern Cape, South Africa: A quantitative and qualitative investigation. *Bio Medical Central Journal, 7:723;1-10*.

Tsawe, M., Moto, A., Netshivhera, T., Ralesego, L., Nyathi, C. & Susuman, S. (2015). Factors influencing the use of maternal healthcare services and childhood immunization in Swaziland. *International Journal of Equity in Health, 14:32;1-11*.

Tsegay, Y. Gebrehiwot, T. Goicolea, I. Edin, K. Lemma., H. & Sebastain, M.S. (2013). Determinants of antenatal and delivery care utilization in Tigray Region, Ethopia: A cross-sectional study. *International Journal of Equity in health, 12:30:1-10.*

Turan, J.M., Bukusi, E.A., Onono, M., Holzemer, W.L., Miller, S. & Cohen, C.R. (2011). HIV/AIDS Stigma and Refusal of HIV Testing Among Pregnant Women in Rural Kenya: Results from the MAMAS Study. *AIDS Behaviour, 15:1111–1120.*

Ugwu, N.U. & de Kok, B (2015). Socio-cultural factors, gender roles and religious ideologies contributing to Caesarian-section refusal in Nigeria. *Reproductive health, 12:70;1-13.*

Ulrich, S. (2008). *On critical theory*. Analyse & Kritik (Lucius & Lucius, Stuttgart), 30:2;399–423. https://www.degruyter.com/downloadpdf/j/auk.2008.30.issue-2/auk-2008-0204/auk-2008-0204.pdf. Accessed 10/03/18.

UNDP. (2011). Discussion paper. A social determinants approach to maternal health: Roles for development actors. www.undp.org/content/dam/undp/library/Democratic%20Governance/Discussion%20Paper%MaternalHealth.pdf. Accessed 1/2/14.

UNDP, UNFPA, WHO. & World Bank Special Programme of Research, Development and Research Training in Human Reproduction. (2002). *WHO Programme to map best reproductive health practices: WHO Antenatal care randomized trial: manual for the*

implementation of the new model. WHO document WHO/RHR/01.30. Geneva. http://apps.who.int/iris/bitstream/handle/10665/42513/WHO_RHR_01.30.pdf;jsessionid=EE267254EBB9E168642F7A96A9EC167B?sequence=1. Accessed 14/03/17.

UNESCO International Bureau of Education. (2001). The development in education: The education system at the end of the 20th century, 1990-2000. National report of the Republic of Zimbabwe. www.ibe.unesco.org/International/ice/natrap/Zimbabwe.pdf. Accessed 1/4/18.

UNICEF. (2008). The state of the world's children: Maternal and New born health. New York. https://www.unicef.org/sowc09/docs/SOWC09-FullReport-EN.pdf. Accessed 21/02/17.

UNICEF (2014). Preventing mother to child transmission of HIV (PMTCT) in Nepal. https://www.unicef.org/rosa/factsheet-nepal-PMTCTpdf. Accessed 19/12/17./

UNICEF (2015) Improving maternal and newborn child health outcomes among Apostolic Religious Groups in Zimbabwe. UNICEF.

UNICEF (May 2016) Despite accelerated progress, in regions where maternal mortality is highest, the coverage of skilled birth attendance at birth is lowest. www.unicef//Data.unicef.org/maternal-health/delivery-care.html.Retrieved 02/07/2016

UNICEF. (2017). Only half of women worldwide receive the recommended amount of care during pregnancy. https://data.unicef.org/topic/maternal-health/antenatal-care/. Accessed 17/04/17.

UNICEF, CCORE. & MConsultingroup. (2011). Apostolic religion, health and utilisation of maternal and child health services in Zimbabwe. https://www.unicef.org/zimbabwe/ZIM-resources-apostolicreligion.pdf. Accessed 17/05/18.

UNFPA. & University of Aberdeen. (2004). Maternal mortality update 2004: delivering into good hands. https://www.unfpa.org/sites/default/files/pub-pdf/mmupdate05-eng.pdf. Accessed 10/04/17.

UNFPA. & University of Aberdeen. (2004). Maternal mortality update 2004: delivering into good hands. https://www.unfpa.org/sites/default/files/pub-pdf/mmupdate05-eng.pdf. Accessed 10/04/17.

United Nations (2013). United Nations Issue paper in Zimbabwe: Maternal Mortality in Zimbabwe, Evidence, Costs and Implications. www.zw.one.un.org/sites/default/files/UN-ZW. Accessed 3/03/14.

United Nations. (1949). United Nations universal declaration of human rights 1948. https://www.jus.uio.no/lm/en/pdf/un.universal.declaration.of.human.rights.1948.portrait.letter.pdf. Accessed 5/4/18.

USAID. (2011). *Levels and trends in the use of maternal health services in developing countries: DHS comparative reports 26*. ICF Macro Calverton, Maryland, USA. https://dhsprogram.com/pubs/pdf/CR26/CR26.pdf. Accessed 3/05/17.

USAID. (2001). Postnatal Care. http://www.pdf.usaid.gov/pdf_docs/Pnadn147.pdf. Accessed 15/02/17.

USAID. (2014). USAID Maternal Health Strategy 2014-2020: Toward ending preventable maternal mortality. Draft 04.22.2014v3. https://www.mchip.net/sites/default/files/mchipfiles/USAID%20Strategy%20Apr.22.14.pdf. Accessed 24/03/15.

USAID. & Maternal and Child Survival Program. (2016). Supporting birth in alternative positions. https://www.mcsprogram.org/wp-content/uploads/2016/09/Overview-Alternative-Birth-Positions.pdf. Accessed 12/05/18.

USAID, The White Ribbon Alliance. & Healthy Policy Project (2013). A guide for advocating for respectful maternity care. https://www.whiteribbonalliance.org/wp-content/uploads/2017/11/RMC-Guide-FINAL-pdf. Accessed 13/05/18.

USAID, ZIMSTAT, Zimbabwe MOHCC, UNFPA, UNDP, UNICEF, UKAID, Australian Aid, European Union & Sida (2016) Zimbabwe Demographic and Health Survey 2015 Key Indicators. Zimbabwe National Statistics Agency, Harare. Zimbabwe.

USAID, Nepal Family Health Program. & John Hopkins. (2007). Maternal and Neonatal Care Program: Summative Report on Program activities and results in Banka, Jhapha and Khancharpur districts from September 2005-September 2007.Nepal.

USAID, World Bank, UNICEF, Pan American Health Organizatio (PAHCO), Food and Agriculture Organization (FAO), Micronutrient Initiative & Population, Health and Nutrition Information (PHNI), (2003). Anaemia Prevention and Control: What Works. Part 1 Program Guidance.http://siteresources.worldbank.org/NUTRITION/Resources/281846-1090335399908/Anemia_Part1.pdf. Accessed13/05/18.

Vallenga, D., Grypdonck, M.H., Hoogwerf, L.J. & Tan, F.I. (2009). Action research: what, why and how? Acta. Neurol. Belg,109:2;81-90.

Warren, C. (2010). Care seeking for maternal health: challenges remain for poor women. *Ethiopia Journal of Health Development, 24 :1;100-104.*

Weiss, S.M., Peltzer, M., Villar-Loubet, O., Shikwane, M.E., Cook, R. & Jones, D.L. (2014). Improving PMTCT Uptake in Rural South Africa. *Journal of International Association Providing AIDS Care,13:3;269-276.*

Wells, D. (1995). The importance of critical theory to nursing: A description using descriptive research concerning discharge decision-making. *Canadian Journal of Nursing Research, 27:2;45-58.*

Westfall, J.M., Ingram, B., Navarro, D., Magee, D., Niebauer, L., Zittleman, L., Fernald, D. & Pace, W. (2012). Engaging communities in education and research: PBRNs, AHEC, and CTSA. *Clinical Translational Science, 5;250-258.*

Western, D. & Rosenthal, R. (2003). Quantifying Construct Validity: Two Simple Measures. Journal of Personality and Social Psychology, 84:3; 608–618.

White Ribbon Alliance (2011) Respectful Maternity Care: The Universal Rights of Childbearing Women (Full charter). Futures Group. http://www.healthpolicyproject.com/pubs/46-FinalRespectfulCareCharter.pdf. Accessed 13/05/18.

White Ribbons Alliance Zimbabwe Strategic Plan, 2018-2022. Unpublished.

WHO. (2002). *Antenatal care randomized trial: manual for the implementation of the new model.* WHO document WHO/RHR/01.30; 1-42. http://apps.who.int/iris/bitstream/handle/10665/42513/WHO_RHR_01.30.pdf?sequence=1. Accessed 30/02/2717.

WHO. (2004). A glossary of terms for community health care and services for older persons. WHO Centre for Health Development. Kobe. Japan. http://www.who.int/kobe-centre/aheing/ahp-vol5-glossary pdf. Accessed 9/12/15

WHO. (2005). Opportunities for Africs newborns. http://www.who.int/pmnch/media/publications/aonsectionIII_2.pdf. Accessed 12/8/16.

WHO (2006) Making Pregnancy Safe: Review of the early implementation phase 2002-2003. Report Chisinau, Republic of Moldova 22-24 March 2004. http://apps.who.int/iris/bitstream/handle/10665/107588/E84613.pdf?sequence=1.

WHO. (2010). Health Service Delivery. http://www.who.int/healthinfo/systems/WHO-MBHSS-2010-section1-web.pdf?ua=1. Accessed 30/01/17.

WHO. (2011). *International Statistical of Diseases and Related Health Problems. 10th Revision. Volume 2 Instruction Manual. 2010 Edition*. Malta. WHO Library Cataloguing –in-Publication Data.

WHO. (2012). *Guideline: Daily iron and folic acid supplementation in pregnant women.* Geneva. WHO Library Cataloguing-in-Publication Data.

WHO. (2013). *WHO recommendations on postnatal care of the mother and newborn*. Geneva. WHO Library Cataloguing-in- Publication Data.

WHO. (2014). *WHO recommendations on postnatal care for the mother and new born*. Geneva. WHO Library Cataloguing-in-Publication Data.

WHO. (2015). The Ottawa Charter of Health Promotion. http://www.ct.gov/dmhas/lib/dmhas/ircc2015/recoveryinquebec.pdf. Accessed 7/22/18.

WHO. (2015). *Guideline on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV*. Geneva. WHO Library cataloguing in publication data.

WHO. (2015). *WHO recommendations on health promotion interventions for maternal and new born health*. Geneva. WHO Library Cataloguing-in-Publication Data.

WHO. (2016). WHO recommendations on antenatal care for a positive pregnancy experience. http://www.who.int/iris/bitstream/10665/250800/1/WHO-RHR-16.12-eng.pdf. Accessed 7/02/17

WHO. (2016). WHO recommendations on antenatal care for a positive pregnancy experience. http://www.who.int/iris/bitstream/10665/250800/1/WHO-RHR-16.12-eng.pdf. Accessed 7/02/17

WHO. (2016). Health Education. http://www..who.int/topics/health-education/en/. Accessed 13/06/18.

WHO. (2017). Maternal, new born, child and adolescent health. http://www.who.int/maternal_child_adolescent/topics/newborn/postnatal_care/en. Accessed 15/02/17.

WHO, UNICEF, UNFPA, World Bank Group & United Nations (2015) Trends in Maternal Mortality: 1990-2015. Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations. http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2015/en/. Accessed 7/02/17.

WHO, ICM & FIGO. (2004*). Making pregnancy safer: The critical role of the skilled attendant.* Geneva. WHO Library Cataloguing-in-Publication Data.

Widyawati, W., Jans, S., Utomo, S., van Dillen, J. & Janssen, A.L. (2015). A qualitative study on barriers in the prevention of anaemia during pregnancy in public health centres: perceptions of Indonesian nurse-midwives*. BMC Pregnancy and Childbirth, 15:47;1-8.*

Willis, J.W. (2007). *Foundations of qualitative research: Interpretive and critical approaches*. London. SAGE Publications.

Workineh, Y.G. & Hailu, D.A. (2014). Factors affecting utilization of postnatal care services in Jobitena District, Amhora Region, *Ethiopia. Science Journal of Public Health, 2:3 ;169-176.*

Willig, C. (2013). *Introducing Qualitative Research in Psychology*. 3rd Edition. London. Open University Press.

Willis, J.W. (2007). Foundations of Qualitative Research.: Interpretive and Critical Approaches. London. SAGE Publications.

Wilunda, C., Scanagatta, C., Putoto, G., Montalbetti, F., Segafredo, G., Takahashi, R., Mizerero, S.A. & Betran, A.P. (2017). Barriers to utilisation of antenatal care services in South Sudan: a qualitative study in Rumbek North Country. *Reproductive Health, 14:65;1-10*.

Winter, R. & Munn-Giddings, C. (2001). *A Handbook for Action Research in Health and Social Care*. London. Routledge Taylor & Francis.

Wright, C., Davey, A., Elmort, N., Carter, M., Mounce, L., Wilson, E., Burt, J., Roland, M. & Campbell, J. (2016). Patients' use and views of real time feedback technology in General Practice. *Health Expectations, 20;419-433*. New York. John Wiley and Sons Ltd.

Yeganeh, N., Simon, M., Mindry, D., Nielsen-Saines, K., Chaves, M.C., Santos, B., Melo, M., Mendoza, B. & Gorbach, P. (2017). Barriers and facilitators for men to attend prenatal care and obtain HIV voluntary counselling and testing in Brazil. PLOS ONE, 12:4;1-15.

Yin, R.K. (2011). *Qualitative Research from Start to Finish*. New York. The Guilford Press.

Young, R.A. (2002). *Meaning, Negotiation and Communicative Rationality*. American Association for Artificial Intelligence Technical Report WS-02-09. https://www.aaai.org/Papers/Workshops/2002/WS-02-09/WS02-09-005.pdf. Accessed 23/04/17.

Zamawe, C., Banda, M. & Dube, A. (2015). The effect of mass media campaign on Men's participation in maternal health: a cross-sectional study in Malawi. *Reproductive Health,12:31; 1-7.*

Zhou, B., Ning, C., McCann, C.D., Liao, Y., Yang, Z., Zou, Y., Jiang, J., Liang, B., Abdulla, A.S., Qin, B., Upur, H., Zhong, L. & Liang, H. (2017). Impact of educational inerventions on acceptance and uptake of male circumcision in the general population of Western China: A multicentre cohort study. *Scientific Reports, 7:14931;1-8.*

Zimbabwe Confederation of Midwives Strategic Plan 2014-2018. Unpublished.

Zimbabwe Ministry of Health and Child Care (2007). *Zimbabwe National Maternal and Neonatal Health Roadmap 2007-2015*. Harare. Governent of Zimbabwe.

Zimbabwe Ministry of Health and Child Care & UNICEF (2011). *Health Transition Fund: A multi donor pooled transition for health in Zimbabwe*. Harare. Zimbabwe.

Zimbabwe Ministry of Health and Child Care, EGPAF, USAID & UKAID (2012). *More than meets the eye: Home deliveries in Mashonaland Central, Zimbabwe*. Harare. OPHID.

Zimbabwe National Statistics Agency., European Commission., UNDP., UNICEF & MCHIP. (2014). *Multiple Indicator Cluster Survey Final Report*. Harare. UNICEF.

Zimbabwe National Statistics Agency. (2015). Zimbabwe Mulitiple Indicator Cluster Survey 2014, Final Report. USA. Rockville Maryland.

Zimbabwe National Statistics Agency. & ICF International. (2016). *Zimbabwe Demographic and Health Survey 2015 Final Report.* USA. Rockville Maryland.

Zimbabwe Traditional Leaders Act 25/1998. Modified by S.I. 430A/1999, 22/2001 http://www.extwprlegs1-fao.org/docs/pdf/zim83838.pdf. Accessed 04/06/18.

Zuber-Skerritt, O. In Sankara, S., Dick, B. & Passfield, R. (eds) (2001). *Effective change management through action research and action learning: concepts, perspectives, processes and applications*. Lismore. Southern Cross University Press.

ANNEXURES

ANNEXURE A: DECLARATION REGARDING PLAGIARISM

I declare that the dissertation on Initiatives for Enhancing Utilisation of Maternal Healthcare Services: A Participatory Action Research, is my own work and that all sources that I have used or quoted have been acknowledged by means of a complete reference.

....	5/10/18
Signed	Date

JESCA MUTOWO

ANNEXURE B

Data collection instruments

INTERVIEW GUIDE FOR FOCUS GROUP DISCUSSION WITH MATERNAL HEALTHCARE PROVIDERS AND POSTNATAL WOMEN

1. What are the beliefs and practices that women are expected to conform to from the time they realise that they are pregnant so as to ensure a healthy baby?
2. Who are women's preferred maternal healthcare provider during pregnancy, delivery and postnatal period?
3. What are the reasons for the preferred maternal healthcare provider?
4. In what instances do pregnant women choose to visit health providers (clinic)?
5. What are the reasons for delaying in (probe socio-cultural, religious and structural causes):
   a) Deciding to seek maternal care when problems occur while one is pregnant (First delay)?
   b) Accessing a health care centre when in labour or when problems occur during pregnant (Second delay)?
   c) Getting treatment when one is at a health care centre when one is seeking care during pregnancy (Third delay)?
6. What do you think are key barriers (Probe socio, economic, cultural religion and other barriers) to:
   a) Attending antenatal care?
   b) Delivering at a health institute?
   c) Seeking postnatal care?
7. What key messages should be communicated to encourage utilisation of maternal health care services to:
   a) Pregnant women
   b) Community members
   c) Maternal healthcare providers
   d) Men
8. What can be done to influence women to utilise maternal healthcare services?
9. What initiatives can be developed to influence utilisation of maternal healthcare services?

INTERVIEW GUIDE FOR FOCUS GROUP DISCUSSION WITH COMMUNITY LEADERS

1. What are the beliefs and practices that women are expected to conform to from the time they realise that they are pregnant so as to ensure a healthy baby?
2. What do you think are key barriers (Probe socio, economic, cultural religion and other barriers) to :
   a) Attending antenatal care?
   b) Delivering at a health institute?
   c) Seeking postnatal care?
3. What key messages should be communicated to encourage utilisation of maternal health care services to:
   a) Pregnant women
   b) Community members
   c) Maternal healthcare providers
   d) Men
4. What can be done to influence women to utilise maternal healthcare services?
5. What initiatives can be developed to influence utilisation of maternal healthcare services?

ANNEXURE C

PATIENT / PARTICIPANT'S INFORMATION LEAFLET & INFORMED CONSENT FORM FOR MATERNAL HEALTHCARE PROVIDERS, COMMUNITY MEMBERS AND POSTNATAL WOMEN

RESEARCH TO HELP MOTHERS USE* HEALTHCARE SERVICES *BEFORE AND AFTER THE BIRTH OF THEIR BABIES: USING DIFFERENT PEOPLE TO HELP WITH GETTING THE INFORMATION

Dear Participant

Dear Mr. / Mrs. .... date of consent procedure …...../…....../…......

1) INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what ***the study is about***. If you have any questions, which are not fully explained in this leaflet, ask the investigator ***immediately***. You should not agree to take part unless you are completely happy about all the procedures involved.

2) THE NATURE AND PURPOSE OF THIS STUDY

You are invited to take part in this research study. The aim of this study is to ***improve the use of*** healthcare services ***for women before and after the birth of their babies*** in Mhondoro-Ngezi district in Mashonaland West Province. By doing so I wish to learn more about the ***reasons why women do not use*** healthcare services ***before and after the birth of their babies***. ***Reasons that cause women not to use*** healthcare services can be changed and this could save ***the lives of*** other pregnant women.

3) EXPLANATION OF PROCEDURES TO BE FOLLOWED

This study involves answering some questions with regard to ***the use of healthcare services for women before and after the birth of their babies*** and ***talking about*** your ***own*** experiences ***using healthcare services***. I will also record the interviews ***so that I can listen to it again***.

4) RISK AND DISCOMFORT INVOLVED.

We do not expect that you will be harmed or feel uncomfortable during the research. Group discussions will take up to an hour to about an hour and half or until ***all people agree*** and this may take up some of your time. The University of Pretoria has no insurance for ***people getting injured during*** research.

5) POSSIBLE BENEFITS OF THIS STUDY.

Although you may not ***get anything*** from the study, ***I will use the concerns that you discuss during the groups to improve the use of healthcare services for women before and after the birth of their babies*** in rural Mashonaland West Province. These ***improvements*** can help ***to prevent mothers dying before and after the birth of their babies*** in rural Mashonaland West Province.

6) I understand that if I do not want to participate in this study, I will still receive treatment *as always* for my illness.

7) I may at any time *tell the researcher that I do not want to be part of the research*.

8) HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This ***study procedures*** were submitted to the Faculty of Health Sciences Research Ethics Committee, University of Pretoria, telephone numbers 012 3541677 / 012 3541330 and written approval has been ***given*** by that committee. The study ***will follow the rules of*** the Declaration of Helsinki (last update: October 2008), which ***tells*** doctors ***or nurses how to do*** research ***with*** human ***beings***/subjects ***in a safe way***. A copy of the Declaration may be ***asked*** from the investigator should you ***want a copy***.

9) INFORMATION If I have any questions concerning this study, I should contact:

Mrs Mutowo telephone : +263-04-781 127 or cell: +263-773 303 485

10) CONFIDENTIALITY

Everything you say in the groups will be written down, but your name will not be mentioned anywhere. Nobody reading the reports will know your name or who you are.

11) CONSENT TO PARTICIPATE IN THIS STUDY.

I have read or had read to me in a language that I understand the above information before signing this consent form. ***All the information, (***the content and meaning of this information) have been explained to me. I have been given opportunity to ask questions and am satisfied ***(happy)*** that they have been answered satisfactorily ***(well)***. I understand that if I do not participate it will not ***change my treatment*** in any way. I hereby volunteer to take part in this study.

I have received a signed copy of this informed consent agreement ***(form that I have signed)***.

....

Participant's name Date

....

Participant's signature Date

....

Investigator's name Date

....

Investigator's signature Date

....

Witness name and signature Date

VERBAL PARTICIPANT INFORMED CONSENT

I, the undersigned, Mrs Mutowo, have read and have explained fully to the participant, named ……………….. and /or his/her relative, the patient information leaflet, which has

indicated the nature and purpose of the study in which I have asked the patient to participate. The explanation I have given has mentioned both the possible risks and benefits of the study and the alternative treatments available for his/her illness. The particpant indicated that he/she understands that he/she will be free to withdraw from the study at any time for any reason and without jeopardizing his/her treatment.

I hereby certify that the participant has agreed to participate in this study.

Participant's Name ____________________

(Please print)

Participant's Signature ____________________ Date ______________

Investigator's Name ________________________

(Please print)

Investigator's Signature ________________________ Date ______________

Witness's Name _________________ Witness's Signature _ Date ______________

(Please print)

ANNEXURE D

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.
- FWA 00002567, Approved dd 22 May 2002 and Expires 20 Oct 2016.
- IRB 0000 2235 IORG0001762 Approved dd 22/04/2014 and Expires 22/04/2017.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences Research Ethics Committee

26/05/2016

Approval Certificate
New Application

Ethics Reference No.: 181/2016

Title: Initiatives to enhance utilisation of maternal healthcare services: A participatory action research

Dear Jesca Mutowo

The **New Application** as supported by documents specified in your cover letter dated 18/05/2016 for your research received on the 18/05/2016, was approved by the Faculty of Health Sciences Research Ethics Committee on its quorate meeting of 25/05/2016.

Please note the following about your ethics approval:
- Ethics Approval is valid for 1 year
- Please remember to use your protocol number (**181/2016**) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics approval is subject to the following:
- The ethics approval is conditional on the receipt of **6 monthly written Progress Reports**, and
- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Dr R Sommers; MBChB; MMed (Int); MPharMed,PhD
Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

☎ 012 356 3084 deepeka.behari@up.ac.za http://www.up.ac.za/healthethics
✉ Private Bag X323, Arcadia, 0007 - Tswelopele Building Level 4-60, Gezina, Pretoria

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.
- FWA 00002567, Approved dd 22 May 2002 and Expires 03/20/2022.
- IRB 0000 2235 IORG0001762 Approved dd 22/04/2014 and Expires 03/14/2020.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences Research Ethics Committee

26/10/2017

Approval Certificate
Amendment
(to be read in conjunction with the main approval certificate)

Ethics Reference No: 181/2016

Title: Initiatives for enhancing utilisation of maternal healthcare services: A participatory action research

Dear Mrs Jesca Mutowo

The **Amendment** as described in your documents specified in your cover letter dated 27/09/2017 received on 28/09/2017 was approved by the Faculty of Health Sciences Research Ethics Committee on its quorate meeting of 25/10/2017.

Please note the following about your ethics amendment:
- Please remember to use your protocol number (**181/2016**) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committe may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics amendment is subject to the following:
- The ethics approval is conditional on the receipt of **6 monthly written Progress Reports**, and
- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Dr R Sommers; MBChB; MMed (Int); MPharMed; PhD
Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health).

☎ 012 356 3084 deepeka.behari@up.ac.za / fhsethics@up.ac.za http://www.up.ac.za/healthethics
Private Bag X323, Arcadia, 0007 - Tswelopele Building, Level 4, Room 60, Gezina, Pretoria

Telephone 730011
Telegraphic Address
"MEDICUS", Harare
Fax: 729154/793634 (702293 FHP)
Telex: MEDICUS 22211ZW

Reference:
MINISTRY OF HEALTH AND
CHILD CARE
P.O. Box CY 1122
Causeway
Zimbabwe

20 May 2016

Mrs Jesca Mutowo
10611 Boyd Way
Southerton
Harare

Dear Madam

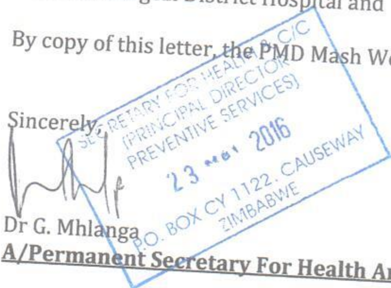
RE: PERMISSION TO CONDUCT A PHD STUDY ON INITIATIVES TO ENHANCE UTILISATION OF MATERIAL HEALTHCARE SERVICES: A PARTICIPATORY ACTION RESEARCH

Your letter dated 18 May 2016, on the above subject matter refers.

The Ministry of Health And Child Care has no objection to your request to conduct a PhD study on initiatives to enhance utilisation of Maternal Health Care services at Mhondoro-Ngezi District Hospital and clinics in the catchment area.

By copy of this letter, the PMD Mash West is advised about your study.

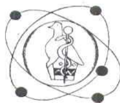
Sincerely,



Dr G. Mhlanga
A/Permanent Secretary For Health And Child Care

cc- PMD – Mash West

Telephone: 791792/791193
Telefax: (263) - 4 - 790715
E-mail: mrcz@mrcz.org.zw
Website: http://www.mrcz.org.zw



Medical Research Council of Zimbabwe
Josiah Tongogara / Mazoe Street
P. O. Box CY 573
Causeway
Harare

APPROVAL

Ref: -MRCZ/A/2095

29 August, 2016

Jesca Mutowo
University of Pretoria
Department of Nursing Sciences
P. Bag X323
ARCADIA 0007
Pretoria

RE:-Application For Approval Of Study Entitled :-Initiatives to enhance utilization of maternal healthcare services: A participatory Action research.

Thank you for the application for review of Research Activity that you submitted to the Medical Research Council of Zimbabwe (MRCZ). Please be advised that the Medical Research Council of Zimbabwe has **reviewed** and **approved** your application to conduct the above titled study.

This approval is based on the review and approval of the following documents that were submitted to MRCZ for review:-
a) Research Proposal
b) Informed Consent Forms (English and Shona)

- **APPROVAL NUMBER** : **MRCZ/A/2095**

This number should be used on all correspondence, consent forms and documents as appropriate.

- **TYPE OF MEETING** : **Full Board**
- **EFFECTIVE APPROVAL DATE** : **29 August, 2016**
- **EXPIRATION DATE** : **28 August, 2017**

After this date, this project may only continue upon renewal. For purposes of renewal, a progress report on a standard form obtainable from the MRCZ Offices should be submitted three months before the expiration date for continuing review.

- **SERIOUS ADVERSE EVENT REPORTING**: All serious problems having to do with subject safety must be reported to the Institutional Ethical Review Committee (IERC) as well as the MRCZ within 3 working days using standard forms obtainable from the MRCZ Offices or website.
- **MODIFICATIONS**: Prior MRCZ and IERC approval using standard forms obtainable from the MRCZ Offices is required before implementing any changes in the Protocol (including changes in the consent documents).
- **TERMINATION OF STUDY**: On termination of a study, a report has to be submitted to the MRCZ using standard forms obtainable from the MRCZ Offices or website.
- **QUESTIONS**: Please contact the MRCZ on Telephone No. (04) 791792, 791193 or by e-mail on mrcz@mrcz.org.zw

Other

- Please be reminded to send in copies of your research results for our records as well as for Health Research Database.
- You're also encouraged to submit electronic copies of your publications in peer-reviewed journals that may emanate from this study.

Yours Faithfully

....

MRCZ SECRETARIAT
FOR CHAIRPERSON
MEDICAL RESEARCH COUNCIL OF ZIMBABWE

PROMOTING THE ETHICAL CONDUCT OF HEALTH RESEARCH

Telephone: 621100-19
Fax: 621157

Reference: HCHEC 200916/68

HARARE CENTRAL HOSPITAL
P. O. Box ST 14
SOUTHERTON
Harare

27 September 2016

Mrs. Jesca Mutowo
10611 Boyd Way
Southerton
Harare

Dear Mrs. Mutowo,

REF: INITIATIVES TO ENHANCE UTILISATION OF MATERNAL HEALTHCARE SERVICES: A PARTICIPATORY ACTION RESEARCH

I am glad to advise you that your application to conduct a study Entitled: **Initiatives to Enhance Utilisation of Maternal Healthcare Services: A Participatory Action Research (Ref: HCHEC 200916/68),** has been approved by the Harare Hospital Ethics Committee.

This approval is premised on the submitted protocol. Should you decide to vary your protocol in any material way please submit these for further approval.

You are advised to avail the results of your study whether positive or negative to the hospital through the committee for our information.

Yours sincerely,

DR. C. Pasi
Chairman Harare Central Hospital Ethics Committee

ANNEXURE E

DATA CAPTURING SHEETS

SECTION A: MATERNAL MORTALITY

Month	Nature of Obstetric Complication	Number of deaths	Number of transfers

SECTION B: RECORD OF MATERNAL HEALTH CARE UTILISATION
ANTENATAL ATTENDANCES

Month	Number of Attendances

GESTATIONAL AGE AT BOOKING

Age	Number of Bookings

MATERNAL DELIVERIES

Month	Number of Deliveries

POST NATAL ATTENDANCES

Month	3/7 Days	10/7 Days	6/52 Weeks	None

SECTION C: RECORD OF MATERNAL MORTALITY MEETINGS

Month	Number of Professionals Attended	Number of Cases Discussed	Outcome

SECTION D: CHECKLIST FOR AVAILABLE RESOURCES
Health care Personnel
Number of midwives
Number of registered nurses
Number of gynecologists
Number of general practitioners
Number of trained staff to manage emergency obstetric complications
Number of village health workers
Number of traditional birth attendants
Facilities
Number of clinics
Number of mother's shelter homes
Operational theatres
Technicalities
Number of ambulances
Communication networks
Road network
Laboratory services
Essential MNH drugs and supplies
Reliability of electricity
Blood bank services

ANNEXURE F

Summarised Participatory Action Research Cycles

PAR Cycle	Objective	Data	Population/ Sample	Data collection	Data analysis	Rigour
Cycle1 Situation Analysis	Describe baseline data on maternal morbidity and mortality rates in Mhondoro Ngezi District	Quantitative	Records and documents, incident reports and statistics, reports from maternal mortality meetings and attendance registers	Checklist (Annexure H)	Statistical analysis	*Validity:* A pre-test of the instrument to test validity *Reliability:* Effort to ensure data are recorded, compiled and analyzed accurately
	Explore and describe baseline data onavailable resources and maternal health care services utilisation in MND.	Qualitative	Healthcare providers, community members and postnatal women/ purposive sampling	Focus groups: maternal healthcare providers, community members and postnatal women; field notes	Content analysis	*Credibility:* Audio-recording of all interviews to capture all the data. *Transferability*: Methods and study setting described in detail
Cycle 2 PAR Develop and Implement	Develop and implement initiatives to enhance utilisation of maternal healthcare services	Qualitative	CIG members/ Purposive method	Reflective journals and minutes of meetings	Content analysis	*Confirmability:* Ensure reflection by the CIG members Encourage discussions during CIG meetings.
Cycle 3 Evaluate the impact	Compare maternal morbidity and mortality rates with baseline data after implementation of initiatives to enhance maternal healthcare services.	Quantitative	Records and documents, incident reports and statistics, reports from maternal mortality meetings and attendance registers	Checklist (Annexure H)	Statistical analysis	*Reliability:* Effort to ensure data are recorded, compiled and analyzed accurately
	Compare maternal health care services utilisation with baseline data after implementation of initiatives to influence utilisation of maternal healthcare services.	Qualitative	Healthcare providers, community members and postnatal women/ Purposive sampling	Focus groups: maternal healthcare providers, community members and postnatal women supplemented with field notes	Content analysis	*Dependability:* Assessed by the supervisors and maternal health experts from the district *Confirmability*: Member checking by the CIG members after data analysis.
	Describe the CIG members' reflection on implementation of the initiatives to influence utilisation of maternal healthcare services.	Qualitative	CIG members/ Purposive method	Reflective journals and minutes of meetings	Content analysis	*Confirmability:* Encourage discussions during CIG meetings.

ANNEXURE G: POSTERS

KUNYORESA PAMUVIRI PACHENA HAMUBHADARE

Mai vaka zvitakura vanotarisirwa:

- **Kunyoresa pamuviri mwedzi mitatu isati yadarika.**
- **Kudzoka kukiriniki kuzoongororwa hutano hwavo nemwana kanosvika kasere.**
- **Kusunungukira kukiriniki kwavanopihwa rubatsiro nekukasika.**
- **Kudzokera kukiriniki kunoongororwa hutano hwavo nemwana kana vasununguka pamazuva echinomwe uye pamavhiki matanhatu.**

MURUME CHAIYE ANOENDA NEMUDZIMAI KUNONYORESA PAMUVIRI

Kuenda kunonyoresa pamuviri pasati padarika mwedzi mitatu zvakanakira kuti:

- Mai vanenge vaine dambudziko vanokurumidzwa kuonekwa vobatsirwa nekukasika.
- Zvimwe zvirwere zvinenge zviripo nezvisingazivikanwe zvinobva zvaonekwa zvorapwa.
- Mai nemwana vanoongororwa hutano hwavo.
- Mai nababa vanopihwa dzidziso maererano nezvepamuviri zvino sanganisa kudya kunotarisirwa kune madzimai anepamuviri, matambudziko avanga sangana nawo vaine pamuviri uye nekuti vanobatsirwa sei nekugadzirira zvingadiwe kana vasununguka.

ANNEXURE H: CHECK-LIST

GWARO REKUONA KUTI KODZERO DZANGU DZAZADZIKISWA

Chinangwa chegwaro iri ndechekuda kugadzirisa hukama pakati pemadzimai vakazvitakura nevashandi vezvehutano panguva madzimai vanenge vachitsvaga rubatsiro panguva vakazvitakura, vachisununguka uye vasununguka. Ivai makasununguka kutaura pfungwa dzenyu. Musaise zita renyu pagwaro iri.Zvamuchataura zvichashandiswa kugadzirisa rubatsiro rwamunowana kana mauya kuchipatara

Zita rechipatara:…………………………………………………………..

Zuva:…………………………………………………………………..

Nzvimbo (Rakidzai nekuisa X kwamapihwa rubatsiro):

(a) Kunoerwa madzimai akazvitakura (kuFHS) ☐

(b) Kunosunungira madzimai akazvitakura (labour ward/maternity ward) ☐

(c) Kunoongororwa madzimai mushure mekusununguka (FHS) ☐

Rakidzai kufara kana kusafara nerubatsiro rwamapihwa nekuisa X

	Hongu	Kwete
Ndapihwa rubatsiro nenguva yakakodzera		
Ndachingamidzwa		
Ndapihwa pokugara		
Vataura neni zvakanaka zvisina rhafu		
Kusununguka pakutaura zvichemo zvangu		
Ndababatwa zvakafanana nevamwe zvisina rusaruro		
Ndanga ndichipuhwa ruremekedzo		
Ndanga ndichisiiwa ndisingabatsirwe nenguva yakanaka		
Vachengeta tsindidzo yezvandataura		
Ndapihwa rubatsiro pakasununguka kwandiri		
Andiperekedza abatwa zvakanaka		
Ndapuhwa tsananguro pane zvese zvanga zvichiitwa		
Ndapihwa mukana wekubvunza mibvunzo pane zvandanga ndisina kunzwisisa		
Ndapihwa mukana wekutaura zvandinoda kuitirwa maererano nehutano hwangu		
Ndatukwa ndichipihwa rubatsiro		
Ndarohwa ndichipihwa rubatsiro		
Ndatswinywa zvidya pakusunungutswa		
Ndakumbirwa mvumo ndisati ndatariswa nhengo dzemuviri wangu		
Ndatukwa nepamusana pehutano hwangu		

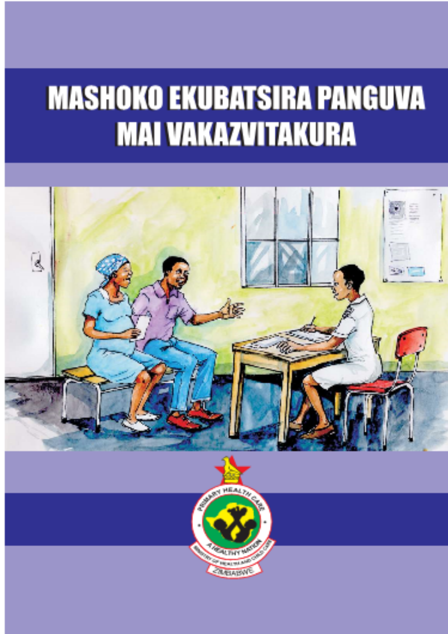
Kana pane zvimwe zvamunoda kutaura nyorai apa :……………………………………

……………………………………………………………………………………………

Mazvita nenguva yenyu.

Isai gwaro iri mubhokisi rezvichemo.

ANNEXURE I: BIRTH PREPAREDNESS INFORMATION BOOKLET



Gwaro iri chinangwa charo ndechekukupai mashoko ekukubatsirai apo mai vanenge vakazvitakura, vachisununguka uye vasununguka. Tinovimba kuti mashoko aya achakubatsirai kuti muzive zvakakoshera kushandisa zvipatara, rubatsiro rwamuno wana kuchipatara uye zvamuno tarisirwa kuita kuti hupenyu hwaamai nemwana husapinde munjodzi.

PANGUVA MAI VAKAZVITAKURA

Baba namai vanokurudzirwa kuenda kuchipatara kunonyoresa amai **vasati vasvika mwedzi mitatu** kuitira kuti kana paine dambudziko vakasikwe kuonekwa vobatsirwa. Vana baba vanokurudzirwa zvikuru kupa ritsigiro kunana mai panguva iyi kuitira kuti hukama hwemhuri yese hunge hwakasimba.

Zvamunofanirwa kuitirwa kana maenda kuchipatara

Mai nababa vanokwaziswa vopihwa pekugara munzvimbo yakasununguka yavano kwanisa kutaura vasingatye kuti vamwe vanganzwe. Mai vakazvitakura vachabvunzwa mibvunzo iyo ichabatsira kuti rubatsiro rwavanopihwa rwuve rwepamusorosoro. Munofanira kuva makasununguka kupa rondedzero yakakwana kuitira kuti kana paine zvimwe zvingade kuziva vana mukoti vazvizive. Izvi zvinobatsira kuti vakwanise kukupai rubatsiro rwepamusososoro. Vmushure mekunge vana mukoti vakumbira mvumo yenuy imi mukatendera, mai vachatariswa kuti mwana ari mudumbu arikukura zvakanaka here. Vana mukoti vanoteerera mwana padumbu uye nekuona kuti mwana arikukura zvinoenderana nemwedzi yepamuviri, vachatarisa kuti mwana akagara zvakanaka here uye kuti mai vangakwanise kusununguka mwana zvakanaka pasina kuchekwa. Bp nehuremo hwamai huchatariswapesi panouya mai kukiriniki. Panouya mai pekutangisisa vachatorwa ropa rekutarisa kuti havana zvirwere here zvingangokanganisa hutano hwavo. Zvinotariswa muropa ramai zvinoti utachiona hweHIV, zvimwewo zvirwere zvepabonde uye kuti pane ukama here pakati peropa ramai neremwana. Mai vakazvitakura vanopuhwa mapiritsi avanonwa nguva dzose kusvika vasununguka.Mapiritsi awa anobatsira kuwedzera ropa uye kuti mai

vasazvare mwana akaremera. Mai vane pamuviri pasina dambudziko vanokurudzirwa kuuya kuzoonekwa kuchipatara nguva inokwana **rusere (8)** kana kudarika. Muchapihwa khadhi ramuno famba naro nguva dzose rinenge rakanyorwa nezveutano hwepamuviri penyu, iro rino kubatsitai kana maenda kune imwe kiriniki kana kuchipatara muchida rubatsiro. Vamwe vehutano vari kukuonai kwekutanga havazonetseka kuti nhoroondo yenyu yepamuviri yakamira sei uye kuti vanga kubatsirei sei.

Pamusoro pekubvunzwa kana paine zvinovanetsa, baba vachatorwawo BP yavo nehuremo hwavo pasikero apo vanoouya namai kukiriniki.

Zvakanakira kunyoresa

- Munyoresa pachena
- Hutano hwamai, baba nemwana hunoongororwa
- Kuongororwa uku kuno kwanisa kuburitsa zvimwe zvirwere zvanga zvisingazivikanwa zvobatsira kuti zvirapwe nguva ichiripo.
- Mai nababa vachapihwa dzidziso yezvavanofanirwa kutevedzera.

Matambudziko anokwanisa kusangana namai vakazvitakura

Kana mai vaka zvitakura vakaona zvinotevera panguva ipi zvayo vanofanira kuenda kuchipatara nekukasira:

- Kubuda ropa kana mvura
- Kusatamba kwemwana ari mudumbu. Mwana ane hutano hwakanaka mudumbu anofanira kutamba nguva zhinje zvinodarika gumi nemaviri pazuva.
- Kurwadziwa nemusoro zvakanyanyisa vachiona nyeredzi, kuzvimba kumeso, maoka nemakumbo uye nekugwinha.
- Maronda kana kuona zvinobuda panhengo dzechidzimai

PANGUVA YEKUSUNUNGUKA

Zvakakosha kuti mai vakazvitakura vasunungukire kuchipatara kana kukiriniki. Kana mai vachigara kure nechipatara uye vaine matambudziko avakambosangana navo kana kuti mimba yavo ndeyekutanga kana yachishanu zvichikwira zvino kurudzirwa kuti vaende kunogarira kumatumba pamwedzi minomwe (7). Zviratidzo zvekuti nguva yekusununguka yasvika ndezvinoti:

- Kuputsa shupa
- Kurwadziwa nemusana dumbu rechisunga

Zvakanakira kusunungukira kuchipatara

- Kusunungukira kukiriniki mahara, hamubhadhare.
- Kana paine dambudziko kumwana namai zvino kurumidzwa kugadziriswa nekuti mwana namai vanenge vachiongororwa navana mukoti vachishandisa michina yavo.
- Mai vano sunungukira pakachena zvinoita kuti vasabatire hutachiwana.
- Mai vakarasikirwa neropa rakawanda vanokwanisa kuwedzerwa ropa nekupihwa diripi iro risingawanikwe kumba.
- Munopihwa birth record rekuti zvive nyore kutorera mwana wenyu gwaro rekuzvarwa (birth certificate).

PANGUVA MAI VASUNGUNGUKA

Kana mai vasununguka mwana achatariswa kuti paonekwa kana paine zvisina kumira zvakanaka. Zuva rinotevera mai vachibva kusununguka ivo nemwana vachaongororwa zvakare kuti hapana matambudziko nehutano hwavo here. Mai nemwana vachagara muchipatara mazuva matatu vachiongororwa nekubatsirwa pakuchengeta mwana. Izvi zvinoitirwa kuti kana paine matambudziko akurumidze kuonekwa rubatsiro rwopihwa nekukasira.

Nguva inotarisirwa kuti baba, mai nemwana vadzoke kuchipatara

Pamazuva manomwe: Mai nababa vese vachatorwa BP netemperature uye vachabvunzwa kana vaine matambudziko avari kusangana nawo. Mai vachatariswa mhando nehuwandu hweropa ravari kubuda kuitira kuti kana zvisina kumira zvakanaka vanobva vapihwa rubatsiro nekukasira. Kana mai vaine masitichi vachatariswa kuti arikupora zvakanaka here. Hukama hwaamai nemwana huchaongororwa zvakare. Mwana achatariswa kuti pane zviri kunetsa here uye kuti ari kuyamwa zvakanaka here.

Pamasvondo matanhatu: Baba, mai nemwana vachaongororwa hutano hwavo zvakare. Mwana achatariswa kuti arikukura zvakanaka, kuti arikuyamwa zvakanaka here uye achabaiwa nekudonhedzerwa majekiseni ekudzivirira zvirwere. Baba namai vachadzokororwa kutorwa ropa rekuongorora hutachiona hweHIV. Kana ropa ramai nababa rikaonekwa riine hutachiona vachaiswa pamishonga uye vachapihwa dzidziso maererano ekurarama nehutachiona. Mwana achatorwa ropa pachitsitsinho kuti aonekwe kuti haana kubatira hutachioina hweHIV here. Kana mwana achinge aonekwa aine hutachione hweHIV achipihwa mushonga waanenge achifanirwa kunwa. Mai nababa vanobva vapihwa dzidziso inoenderana nezvaonekwa.

Mamwe mashoko anga kubatsirei

Zvakakosha kuti baba namai mushande pamwe chete navana mukoti. Kana muine dambudziko uye kana kusafara nemabatirwo amunenge maitwa makasununguka kukumbira kutaura nemukuru wechipatara kana kunyora mubhokisi rezvichemo riri pakiriniki.

Garai makaronga muchovha uchakuendesai kukiriniki apo pamuviri panenge porwadza.

ANNEXURE J: MINISTRY OF HEALTH AND CHILD CARE APPROVAL LETTER

Telephone: +263-4-798537-60
Telegraphic Address:
"MEDICUS", Harare
Fax: +263-4-729154/793634
(702293 FHP)
Telex: MEDICUS 22211ZW

Reference:
Ministry of Health and Child Care
P O Box CY1122
Causeway
HARARE

26 May 2017

To whom it may concern

REF: PERMISSION TO USE MINISTRY OF HEALTH AND CHILD CARE LOGO ON IEC MATERIAL ON A PHD STUDY ON INITIATIVES TO ENHANCE UTILIZATION OF MATERNAL HEALTHCARE SERVICES: A PARTICIPATORY ACTION RESEARCH

This letter serves to confirm that the information, education and communication (IEC) material to create awareness at St Michaels Mission Hospital by the cooperative inquiry group which was formed to undertake a research study with Jesca Mutowo a PhD student with University of Pretoria as part of a study to develop initiatives to enhance utilization of maternal healthcare services were checked, quality assured and allowed to use the Minister of Health and Child Care logo. The IEC materials can therefore be used at St Michaels Mission Hospital and the Mhondoro-Ngezi District to create awareness on the recommended World Health Organization early initiation of antenatal care and subsequent number of contact visits; on free maternity booking, promotion of institutional deliveries and postnatal return visits; and need for male partner and community involvement in maternal health issues.

Sincerely,

Dr B. Madzima
Director Family Health
FOR: Secretary for Health and Child Care

ANNEXURE K: QUALITATIVE DATA ANALYSIS AUDIT TRAIL CYCLE 3

FOCUS GROUP DISCUSSION WITH POSTNATAL WOMEN

Date: 25 August 2017

Venue: St Michael's Mission Hospital

Present: 6 post natal women

Time: 0940 hours

Duration: 55 minutes

Facilitator: In your opinion, do you think pregnant women are using the clinics during pregnancy?

Participant 1: Yes, especially these days. They prefer delivering at the hospital. But there are still some who are delivering at home.

Participant 4: yes most people are now coming to the hospital.

Facilitator: When should women book their pregnancy?

Participant: at 4 or 5 months

Facilitator: What are the beliefs that women are expected to conform to from the time they realise that they are pregnant so as to ensure a healthy baby?

Participant: Women are told to come early so that if you have for example HIV you can get help early for you and the baby

Participant: When a woman in this area gets pregnant she only tells her husband and no one else. This is because of fear of being bewitched and the pregnancy will abort or miscarriages.

Participant: Yes the pregnancy is kept secret from all other people but this does not prevent a woman to go and book early. She goes.

Participant: There are some things that are done culturally. For example using African medicine called *rukato* (a root which is dug up and crushed and put into water) to open the birth canal.

Participant: Yes, you drink the water from the time you reach 8 months until delivery. You take as much as possible.

Participant: Other women use wild tea leaves, they boil and drink like tea

Participant 2: Others drink water mixed with soil from where a hare was lying,

Participant: Yes, people also drink water mixed with a carpenter bee's house or a mole's soil

Participant: women still use the African medicine and also go hospital.

Participant: Some women come to hospital and others do not. It is 50-50. Some come to hospital for delivery while others prefer delivering at home. But the majority of women prefer delivering at the hospital.

Facilitator: What are the signs that show that the baby in the womb is alive?

Participant: the baby will be moving

Participant : yes one notices if the baby is not moving

Facilitator: how do you know that the way the baby is moving is okay or not?

Silence

Participant: We do not know how often the baby should move but if the baby moves we can tell that the baby is okay.

Facilitator: How many antenatal visits should pregnant woman have?

Participant: A pregnant woman should go for check up every month till she delivers

Silence

Participant: It depends with where you are coming from. If you stay far away you don't come here a lot. Some come when they are in labour, while others when they are 9 months they are told to go and wait at the hospital.

Facilitator: Why is it important to book early?

Participant: so that nurses will treat you better

Participant: It depends. Sometimes you don't get treated well even after you have booked.

Participant: I was not treated well when I came to deliver my second baby. My waters broke late and every time I coughed the nurse would shout at me saying I am trying to force it to break. When the waters broke the nurse did not come. I pushed the baby alone, the nurse was not there. The nurse came running without wearing gloves to deliver the baby. She shouted at me and said she was now delivering the baby without gloves.

Participant: If you book early you will get help early.

Participant: Some times during the course of your pregnancy your blood pressure may be raised. If you book, this will be detected when you go to the clinic.

Facilitator: Who are women's preferred maternal healthcare provider during pregnancy and why?

Participant: its 50-50. Others prefer the elderly women in the community because they give them *mushonga wemasuwo* herbs to open the birth canal).

Participant: Yes. Others just stay at home until time for delivery come.

Facilitator: Who are women's preferred maternal healthcare provider during delivery and why?

Participant: most women want to deliver at the clinic or hospital but sometimes they can't. They may deliver on the way because of the distance from the hospital. Women walk from home most of the time. There is no transport to use.

Participant: ehe, others deliver at home because the labour is so fast and it does not give them time to go to the hospital.

Facilitator: Who are women's preferred maternal healthcare provider during postnatal period and why?

Participant: clinic

Participant: clinic because at the clinic you get family planning tablets and at St Michaels' Mission hospital they do not give us.

Participant: Something needs to be done. They say they cannot give family planning here because of their church but not all people in the community belong to their church.

Facilitator: In what instances do pregnant women choose to visit the hospital/ clinic?

Participant: when they are booking or when they have a problem

Participant: when delivering

Facilitator: What are the reasons for delaying in deciding to seek maternal care at hospital / clinic when problems occur while one is pregnant? (probe the socio-cultural, religious and structural causes)**(First delay)**

Participant: most women do not come on time because there will not have transport.

Participant: others procrastinate. They will say we shall go until it is too late.

Participant: others are just lazy. It's laziness.

Participant: Most of us we think what will be happening is normal so there is no need to come. Things will eventually be okay.

Facilitator: What are the reasons for delaying in accessing a health care centre when in labour? (probe the socio-cultural, religious and structural causes)**(Second delay)**

Participant: There is no medicine here at the hospital. Because of that some women see no reason why they should come here and they deliver at home.

Participants: distance from the hospital

Participants: their belief. Those who belong to some apostolic sect are not allowed to come to hospital. They deliver each other at their shelters there.

Facilitator: Do they live in this community?

All: No there are at Bonanza near Murambwa clinic.

Participant: in Seke

Facilitator: What are the reasons for delaying getting treatment at a health care centre when one is seeking care during pregnancy **(Third delay)**

Participant: we also don't know. They will be busy talking to each other.

Facilitator: When should women who have delivered return to hospital for check-up?

Participant: at 10 days, then 6 weeks and 14 weeks

Facilitator: What do you think are the reasons why women do not come back for check-up after delivering?

Participant: lack of knowledge of why they should come

Participant: distance to the hospital is very far and some women will still be in pain after delivering

Facilitator: What are the cultural reasons that may cause women not to return for check-up after delivering?

Participant: religious beliefs because where others go for assistance they are told that if the woman goes to hospital with the baby it will die.

Facilitator: What can be done to encourage pregnant women to go and book early?

Participant: village health worker should continue encouraging women to go to scale

Facilitator: What key messages should be said to men to encourage women to use hospitals and clinics?

Participant:They need to be counselled so that they know the importance of them knowing their HIV status

Participant: ehe, they need to be told that my HIV status is mine not his

Participant: sometimes a woman is tested and is negative and the husband refuses to be tested saying your results are also mine. But maybe this man will be HIV positive. When they sleep together he may infect the wife and this will affect the baby in the womb.

Participant: They need to be told messages that frighten them

Participant: At the hospital they should say a woman who comes alone without her husband will not be booked.

Participant: The problem is also with us women. If we are asked where our husband is we lie to the nurses. We say he works far away. That is the problem.

Facilitator: What messages should be communicated to maternal healthcare providers to encourage women to utilise maternal health care services?

Participant: Nurses should not only write review dates in the book but should also tell the woman when the next visit is. Some women cannot read so they will not come back because they will not know when they are suppose to.

Facilitator: What should be done to encourage women to come to hospital?

Participant: Women want to be served on time because no one wants to come and spent the whole day here.

1. Utilisation of available resources and maternal health care services in Mhondoro-Ngezi district			
	Ante-natal	**Intra-partum**	**Post-natal**
Utilisation of maternal health care services	• Book pregnancy early • 50% use services • Clinics vs hospital • Prefer nurses	• 50%/majority prefer delivery at hospital • Wait at hospital when 9 months, and stay 72 hours after delivery • Prefer nurses More involvement from partners	• Prefer clinics for family planning • Follow up for health education and mother and baby wellness
Flow of health care information to women and community	• Flow of information • Book at 3-5 months/ early (HIV and hypertension screening and management) • Check if baby is moving • Attend 6 ante-natal visits/monthly/when experiencing problems	• Flow of information • Booked patients receive better care	• Flow of information • Knowledge about follow-up regimen and reasons for follow up
Provision of health care information	• Provision of information and health education through home visits, meetings) • Book at 3 months/early to prevent problems • Attend 4-5 ante-natal visits/as advised by nurse/when experiencing problems • Check if baby is moving	• Provision of information regarding signs indicating delivery	• Provision of information regarding follow-up regimen
Attitude of health personnel		Awareness of patients' rights • Respect • Compassion	

2. Barriers to utilisation of available resources and maternal health care services in Mhondoro-Ngezi district			
	Ante-natal	**Intra-partum**	**Post-natal**
Health care system related barriers	• Incidental costs		
	• Health personnel attitude	• Health personnel attitude and conduct (rudeness, fear, justified abusive conduct)	• Health personnel attitude (insensitivity, rudeness)

		• Discourage partner involvement	
	• Health personnel response towards indigenous practices	• Health personnel response towards indigenous practices	• Health personnel response towards indigenous practices
		• Poor service and care	
	• Distance to health facility	• Distance to health facility	• Distance to health facility
		• Presence of male nurses	
	• Transport problems	• Transport problems	• Transport problems
		• Staffing problems (shortage of staff, no skilled staff, staff not paid)	
		• Inadequate resources (no medicine, food)	• Inadequate resources (non-availability of contraception)
1.2 Maternal health care user related barriers	• Lack of knowledge Illiteracy		• Lack of knowledge • Illiteracy
	• Fear of HIV testing	• Fear of reporting abusive treatment	
	• Attitude (shyness, indifference, stubbornness, complacency, cover for men, procrastination)	• Attitude (view birth as a normal process) • Attitude (discourage partner involvement)	• Attitude (indifference, stubbornness, everything is normal)
	• Health care system use problem-based	• Health care system use problem-based	
	• Poverty – not able to pay for investigations	• Poverty leading to shame	• Poverty leading to shame • Not able to buy family planning
	• Physical factors side effects of medication)	• Physical factors (fast labour)	• Physical factors (pain, discomfort)
	• Other responsibilities (children at home)		
1.3 Support system related barriers	• Lack of partner support and involvement (perceived) • Partner afraid of HIV testing (may reject woman)	Lack of partner support and involvement (perceived) Perceived fear of women's anger	
1.4 Community related	• Transport problems	• Transport problems	• Transport problems
	• Distance to health facilities		

barriers	• Lack of community support		
1.5 Culture related barriers	• Fear of witchcraft	• Fear of witchcraft	• Fear of witchcraft
	• Use of herbs (and other indigenous practices)	• Use of herbs to speed up labour (and other indigenous practices)	
	• Cultural beliefs and norms (pregnancy must be concealed during the first few months) • Sanctioning of cultural norms		• Cultural norms (babies should not be taken out)
	• Myths and misconceptions	• Myths and misconceptions	
1.6 Religion related barriers	• Fear of witchcraft		
	• Healing practices (water)	• Religious teaching and doctrine (not allowed to use hospital)	• Religious teaching and doctrine (not allowed to visit clinic, no family planning at mission hospital)
2. Enablers to utilisation of available resources and maternal health care services in Mhondoro-Ngezi district			
	Ante-natal	**Intra-partum**	**Post-natal**
2.1 Health care system related enablers	• Positive health personnel attitude	• Positive health personnel attitude	• Positive health personnel attitude
	• Screening, examination, testing and provision of drugs • PMTCT-HIV testing and counselling	• Pain control and prevention of problems	
	• Cut waiting times		
	• Increase village health care workers in community		• Increase village health care workers in community
	• Provision of Information		
	• Encourage partner involvement		
2.1.Maternal health care user related enablers			
2.2 Support system related enablers	Partner involvement (HIV testing and education) Community support	• Partner involvement	• Partner involvement
2.3 Community related	• Community health workers (encouragement from		

enablers	village health workers)		
	• Decline in traditional birth attendants	• Provision of transport (scotch cart, animals)	
2.4 Culture related enablers	• Involvement of the chief and headmen	• Involvement of the chief and headman	• Involvement of the chief and headmen
2.5 Religion related enablers			