

INFORMATION WOMEN RECEIVE AFTER RECURRING PREGNANCY LOSS IN THE ANTENATAL SETTING OF AN ACADEMIC HOSPITAL IN TSHWANE, SOUTH AFRICA

Ву

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DEDICATION

I dedicate this dissertation and give special thanks to my father Nicholas Molefe Phatladira. Your memories continue to regulate my life although you have passed on. I will never forget your countless efforts to ensure success in my career.

I also dedicate this work for all people who inspired me to achieve my goal and dream:

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ABSTRACT

Introduction and background

The rising incidence of recurrent pregnancy loss among women in antenatal settings remains a concern in South Africa and globally. Despite the information available in healthcare settings, women still have varied perspectives about their pregnancy loss and receive very little or no information regarding the pregnancy loss. The purpose of the study is to explore and describe information women receive after pregnancy loss in an academic Hospital in Tshwane.

Research design and methods

A qualitative research design was followed to collect data from participants. The study involved 20 participants in an academic Hospital in Tshwane who has a history of two or more pregnancy losses and no live baby. A purposive nonprobability sampling was used where potential participants meeting the criteria, were invited to the interviews, and consented to participate in the study. Individual in-depth interviews were conducted on information women received after their pregnancy loss. Thematic analysis was used to interpret and make meaning of data received from the women. Trustworthiness and ethical principles were maintained throughout the study.

Findings

Eight themes emerged from the study. The findings indicated that women who have experienced pregnancy loss were provided with insufficient information or no information after recurrent pregnancy loss. Participants were interested in various methods of information provision which included online searching of information and the use of pamphlets that will provide relevant information to women with a history of recurrent pregnancy loss. Participants perceived barriers to information provision included pain levels after the pregnancy loss, health care provider's negative attitude towards participants and emotional status of the participants.

Conclusion

Recurrent pregnancy loss is an emotionally devastating experience for women hoping for a live baby. Health care providers and midwives should emphasize the benefits of early antenatal care, provide information on pregnancy loss in simplified language understood by



the participants, and provide guidance on the use of varied sources such as online information and peer group support.

Key terms / concepts: Recurrent pregnancy loss. Pregnancy loss. Information. Women. Antenatal Care



LIST OF ABBREVIATIONS

ABBREVIATIO/ACRONYM	MEANING	
AA	ALCOHOLIC ANNONYMOUS	
ANC	ANTENATAL CARE	
BANC	BASIC ANTENATAL CARE	
COVID-19	CORONA VIRUS DISEASE OF 2019	
HIV	HUMAN IMMUNODEFICIENCY VIRUS	
NIPC	NATIONAL INFECTION PREVENTION	
	AND CONTROL	
PMTCT	PREVENTION OF MOTHER TO CHILD	
	TRANSMISSION	
WHO	WORLD HEALTH ORGANIZATION	



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CHAPTER 1

ORIENTATION TO THE STUDY

1.1. INTRODUCTION

Pregnancy loss is a common occurrence in early pregnancy (Koert, Mailling, Sylvest, Krog, Kolte, Schmidt & Nielsen 2019:292). Pregnancy loss is defined as: 'spontaneous demise of pregnancy before the foetus reaches viability', therefore pregnancy loss refers from the time of conception until 24 weeks gestation (Atik, Christiansen, Elson, Kolte, Lewis, Middledorp, Peramo, Queenby, Vermeulen & Gaddinjn 2018:1). According to Lukama and Lemba (2019:66), loss of a foetus at any time of pregnancy is regarded as mortality, whereas El Hachem (2017:331) classify loss of a foetus as embryonic when it occurs before 10 weeks and foetal loss when it occurs after 10 weeks of gestation. Pregnancy loss has serious long-term implications to the wellbeing of women, and depression, anxiety, difficulty in sleeping and many other complications occur due to the loss.

Recurrent pregnancy loss is defined as 'three or more consecutive pregnancies before 22 weeks gestation' (Koert et al: 2019:292). According to Atik et al. (2018:2), recurrent pregnancy loss is a loss of two or more pregnancies. The International Journal for Women define recurrent pregnancy loss as three consecutive pregnancy losses including non-visualized ones (El Hachem, Crepaux, May- Panloup, Decamps & Baouet 2017:331).

Pregnancy loss is a common event affecting 15% to 25% of pregnancies, the incidence of first trimester loss is 15 to 30% but varies substantially according to age and increases in women with a maternal age of more than 40 years (Ei Hachem et al. 2017:332). Up to 51% of women above the age of 40 years loses their pregnancies (Laskin & Spitzer 2017:17). Recurring pregnancy loss affects 1-5% of women (Green & Donoghue 2019:816). In a study conducted in the Gaza strip, pregnancy loss occurred in 10% of clinically recognized pregnancies whereas about 80% of pregnancy losses occurred in the first trimester (Musallam, Salem, Alhadol, Aldadeeb, Botcher & Alhamaida 2018:34). In a study conducted in Soweto, South Africa, for the period October 2014 to November 2015, the findings were that medical conditions, placental and bacterial infections are the leading causes of pregnancy losses at 22 weeks' gestation whereas other losses were due to unexplained causes (Mahdi, Bainer, Moswime, Mose, Mlundu, Chawana, Adam, Izu & Cutland 2019: 503).



The 2017 Saving Mothers Report also highlights hypertension and antepartum haemorrhage as the causes of foetal losses though there is a significant decrease in hypertension from 64% in 2017 to 44% in 2018. This decrease was brought by the action plan from the previous report where early bookings and more antenatal visits were emphasized (Saving Mothers 2017:88). In a review study that included multiple health settings in New York about women's satisfaction with their care after recurrent pregnancy loss, some women reported insufficient information as their concern (Baird, Gagon, de Fiebre, Brigalia, Crowder & Prine 2018:113).

Few studies have indicated the need for information to help couples understand the potential risk to pregnancy losses and providing support should they be concerned about the pregnancy (Norton & Fuber 2018: 4). However, some scholarly work in Qatar have been done in a variety of cultural contexts suggesting pregnancy loss is culturally contingent because women are blamed as contributors to pregnancy loss and presumed unable to fulfil their expected role in society, therefore the belief that understanding the socio-cultural context and perceptions of pregnancy outcomes is important for informing best approaches to public health programs (Omar, Majors, Mohsen, Tamimiha, Taher, & Kashaw 2018:3). According to a study in China, in their effort to decrease pregnancy loss, the researchers suggested an understanding of modifiable risk to pregnancy loss such as obesity, overweight and hypertension in relation to preconception counselling as a measure of prevention (Zhou, Liu, Liu, Zhang, Chen & Qi 2016:60).

Studies focus on causes, management, experiences as well as psychological wellbeing of pregnant women, but not on information needs for women with recurrent pregnancy loss. A study that addresses information women receive is important for the following reasons: women will be able to understand their specific condition, will be able to undergo lifestyle modification and will be given hope for a successful pregnancy outcome.

1.2. PROBLEM STATEMENT

According to the World Health Organization (WHO), pregnant women and infants should receive quality care throughout pregnancy, childbirth, and postnatal period. The World Health Organization (WHO) therefore embraces the guidelines to achieve Every Woman Every Child global strategy, a roadmap for ending all preventable maternal, newborn and child deaths, including stillbirths (WHO:2016).



Despite the differences in findings, recurring pregnancy loss remains a traumatic experience affecting pregnant women worldwide. In clinical practice, women are advised to have two years of child spacing to enable uterine healing and to determine and follow correct processes of conception while observing other risk factors around conception. About 1-5% of women who have encountered pregnancy loss received no explanation regarding their loss (Isazadeh, Hazazimian, Rahmani, Khorasani, Somanmahesh & Karimichalouch 2017:37).

The researcher observed in the antenatal ward of an academic hospital that provides care to high-risk pregnant women in Gauteng Province, that pregnant women are admitted with more than two to three pregnancy losses which occurred before 20 weeks of gestation. Many of these women received no explanation regarding the recurring loss despite all the antenatal programs available in all antenatal settings. During history taking there is no evidence that these women are well informed of the risks and precautions expected on their part, leaving them with recurrent pregnancy losses and no live baby. In a study for sexual reproductive health care, a review shows that women seem to be unsatisfied about the care they received, and amongst others, reports indicate that insufficient information may be the cause of recurrent pregnancy losses (Norton & Furber 2018:4). Should this problem not be addressed, there will be an increase in women with pregnancy losses and an increase in dissatisfaction accompanied by fear during future pregnancies. This study focuses on exploring the information women receive after recurring pregnancy losses in the antenatal setting.

1.3. SIGNIFICANCE OF THE STUDY

This topic is important because the outcome of the study will benefit clinical practice by providing hope to women with pregnancy loss. It may create a platform for collective involvement of partners and community members in pregnancy issues, and translate pregnancy as a pleasurable experience. The study findings may improve the knowledge and skills of midwives regarding information women with pregnancy losses need. The women may be well informed about their conditions and know the importance of pregnancy readiness. The study may reduce pregnancy losses which is currently high according to the Saving Mothers Report of 2017. The study will therefore impact on the emotional wellbeing of these women as well as fulfil the aims of WHO's Every Woman Every Child Global Strategy (WHO:2016). Publication of the findings will also serve as a point of reference to other researchers to improve on current information provided regarding recurrent pregnancy loss.



In the nursing practice the benefit will be to improve patient care, promote best practices and encourage teaching that is evidence based to upcoming student nurses and midwives regarding pregnancy loss.

1.4. RESEARCH QUESTION

What information do women receive from midwives after recurring pregnancy loss in the antenatal setting of an Academic Hospital in Tshwane, Gauteng Province?

1.5. AIM AND OBJECTIVE

The overall aim of the study was to gain an in-depth understanding of the information needs of women who experienced recurring pregnancy loss in the antenatal care setting of an Academic Hospital in Tshwane, Gauteng.

The objective was to explore and describe the information women with recurring pregnancy loss receive in the antenatal setting of the academic hospital in Tshwane. Recommendations for midwives and advanced midwives will be proposed to provide adequate information to women who experienced recurring pregnancy loss in the clinical setting based on the findings of this study with reference to nursing practice, education, and research.

1.6. CONCEPT CLARIFICATION

Information women receive after recurring pregnancy loss in the antenatal setting includes the following concepts:

- **1.6.1. Pregnancy loss** is defined as the 'spontaneous demise of pregnancy before a foetus is viable' (Atik et al. 20118:3). In this study pregnancy loss refers to a loss of pregnancy until 24 weeks gestation before the foetus reaches viability. Neonatal deaths and stillbirths were excluded.
- **1.6.2. Recurrent pregnancy loss** is defined as 'the occurrence of two or more consecutive pregnancy losses during the first trimester' (Isazadeh et al. 2017:39). In this study recurrent pregnancy loss means loss of pregnancy more than twice and having no live baby. Participants in the study were pregnant women who have given consent to participate during their antenatal period and have had two pregnancy losses or more.
- **1.6.3 Information** is 'facts or details that tell you something about a situation, person, event" (Longman Dictionary of Contemporary English for Advance Learners 2014:945). For the



purpose of this study information was knowledge pertaining pregnancy loss communicated to women with a history of recurrent pregnancy loss.

- **1.6.4 Women** are defined as 'a female adult person" (Longman Dictionary of Contemporary English for Advance Learners 2014:2097) and may also refer to a girl. For the study purpose, women were female human beings capable of pregnancy and giving birth with focus on their information needs during pregnancy loss.
- **1.6.5 Antenatal care (ANC)** is the care given by skilled health care practitioners to pregnant women and adolescent girls to ensure the best health condition for both mother and baby (WHO:2016). The focus of the study was on pregnant women who attended follow-up care at the antenatal setting in Tshwane Gauteng Province.

1.7. PARADIGM

A *paradigm* is the way of looking at a natural phenomenon or a worldview that encompasses a set of philosophical assumptions and guides one's approach to enquiry (Polit & Beck 2017:1035). Philosophical assumptions as stated in Creswell and Poth (2018:418) are 'stances taken by the researcher to provide direction to the study such as the researchers view of reality (*ontology*), how researcher knows the reality (*epistemology*), the value stance taken by the enquirer (*axiology*) and procedures used in the study (*methodology*).'

In this study the researcher used *relativism*. Relativism refers to 'that the idea points of view have no absolute truth or validity in them, they only have relative subjective value' (Liamputtong 2019:1097). The researcher chose relativism because she believes that the truth is subjective and each woman with a pregnancy loss has specific information needs.

1.7.1 Philosophical assumptions

The researcher described ontology, epistemology, and methodology as assumptions.

1.7.2. Ontological assumption

Ontology refers to one's philosophical belief about what constitutes reality (Yin 2016:336). In this study the researcher applied relativism due to its nature. According to relativism the researcher searched for meaning of the phenomena rather than the truth. The truth is subjective and dynamic in nature based on participants context. There are also multiple versions to reality and that reality and truth does not exist without meaning. Therefore, the assumption is that reality is not known until in depth mining of ideas from participants is done.



This was done through interviewing of participants, asking probing questions during their routine follow up to understand their version about the phenomena which in the study is the information they receive after pregnancy loss.

1.7.3 Epistemological assumption

Epistemology is defined as 'philosophical underpinnings of researcher's beliefs regarding the nature of reality' (Yin 2016:335). Through interaction with the participants the researcher obtained subjective data from participants to gather specific information received regarding the pregnancy loss. The researcher interviewed participants and explored the knowledge they have regarding pregnancy loss. An assumption is that reality is subjective, what is true to one participant cannot possibly be true to another. Each participant has subjective knowledge depending on the level of information they received after the pregnancy loss and how they understand it from their own perspective. The need for information to participants simply differs from one participant to the other. The researcher spent time with the participants, collected information and interpreted the information to understand its meaning.

1.7.4 Methodological assumption

Methodological assumption is characterized by inductive, emerging and is shaped by researcher's experience in collection and analysis of data. During the study new questions may emerge to understand the topic (Creswell & Poth 2018:55). The researcher conducted interviews to talk to participants to be able to explore the detailed complexity of how they understood pregnancy loss. The researcher was guided by what emerged in the study to be able to answer the research questions.

1.8. DELINEATION

The proposed study was conducted in an antenatal ward in a large Academic Hospital in Tshwane District of Gauteng Province. The selected setting provides care to a diverse population across Gauteng and neighbouring provinces such as Limpopo and Northwest, who are also experiencing complications during their pregnancy. The setting is led by advanced midwives, obstetricians, and sonographers. Participants were women who have experienced at least two or more pregnancy losses during their past pregnancies and with no live babies. Permission for the study was obtained from the institutional ethics committees (refer to Appendices B). The researcher has been working with the population for several years.



1.9. RESEARCH DESIGN DEFINITION

A qualitative research design was used for this study.

1.9.1 Qualitative research design

The research design is the plan for gathering information with the goal of discovering knowledge (Brink et al. 2018:104). The study is a qualitative design because the researcher understands that people construct their own meaning about a phenomenon on interaction with the world, therefore, enough data should be collected to achieve meaningful results. The researcher was the primary instrument in the study for collection and analysis of data. The researcher used a descriptive and an explorative approach to answer the research question.

Explorative research refers to a design that increases knowledge of the field of study and is not intended for generalization (Gray, Grove & Sutherland 2017:1288). Information needs of participants about pregnancy loss was explored to understand and answer the research question.

A *descriptive design* provides the accurate portrayal or characteristic of a person, event, or group in real life situation (Grove & Gray 2019:258). The researcher collected accurate information from each participant through an in-depth interview.

1.9.2 Research methodology

Methodology is the type of research used to answer research questions (Gray Grove & Sutherland 2017:1302). The researcher chose qualitative research to explore information women receive after pregnancy loss to answer the research question. The researcher used interviews to gather data as given by participants' knowledge, experiences, and thoughts about the phenomenon. To conduct a successful interview, the researcher started by planning and preparing for the interviews, establishing good rapport with participants to make them feel relaxed. During the interview the researcher remained alert and applied listening skills to obtain rich data from participants. Table 1.1 summarises the methods used in the research:



Table 1.1 Summary of the methods used in the research

Aspect	Description
Setting	The antenatal setting of an Academic Hospital in Tshwane District,
	South Africa (view section 2.3.1)
Population	Pregnant women with recurrent pregnancy loss of two or more
	between the age of 18 to 40 years (view section 2.3.2)
Sampling	A non-probability purposive sampling was used. Data saturation was
	reached after 20 interviews (view section 2.3.3)
Data collection	Data collection was done through semi-structured interviews (view
	section 2.4)
Data analysis	Data was analysed using thematic content analysis
	(view section 2.6)

1.10. Ethical considerations

Ethical considerations in research are related to protection of human rights and social beings (Brink et al. 2018:28). The researcher followed ethical standards to protect participants. Before the researcher embarked on the study, permission was obtained from the Ethics Committee of the University of Pretoria (refer to Appendices A), and the Research Committee of the Hospital where the study was conducted (refer to Appendices B). During the proposed study the researcher followed the principles of research where participants from vulnerable groups was safeguarded to ensure their protection. The following principles were adhered to; beneficence, respect for human dignity, privacy, confidentiality, justice and obtaining consent from participants. Participants could withdraw anytime during the study and the research was based on benefits rather than risks to participants.

1.10.1 Beneficence

Beneficence is the ethical principle of doing good and not exposing others to harm, minimizing the risks ensure benefits and maintain integrity of the study (Grove & Gray 2019:583). The researcher protected participants from physical and psychological harm, provided privacy and respected participants. The researcher treated the women with sensitivity throughout the study as a vulnerable group due to their pregnancy loss. Establishing good rapport with participants was beneficial to the study because it allowed participants to stay calm and relaxed during the interviews. Participants were offered the opportunity to be referred to the hospital psychologist



by the researcher however they all opted to focus on their current pregnancy. The researcher maintained integrity by ensuring that dissemination of the study findings will benefit women in other institutions experiencing the same phenomenon and invited more researchers into the topic to benefit the wider population.

1.10.2 Respect for human dignity

The principle indicates that people should be treated as autonomous agents with the right to choose whether to participate or not in the study and allowed to withdraw at any time from the study (Grove & Gray 2019:134). In applying autonomy, the researcher obtained informed consent from participants before embarking on the proposed study. Participants were provided with all the study information in simple language. Written consent served as evidence to support the agreement. Participants were allowed to withdraw from the study at any time. All information obtained for the purpose of the proposed study will be treated as confidential. The researcher will ensure proper storage of information away from public access by using electronic filing system that limits and require access codes. Information in the form of notes obtained during the interviews and patient files will be stored for a period of fifteen years and access will be restricted. With regards to anonymity, the researcher made sure that the reports obtained from the study cannot be linked to individual participants. Information obtained from the study are only disclosed to health professionals with the aim of service improvement and further studies.

1.10.3 Principle of justice

The principle states that human subjects have the right to fair treatment which includes access to potential benefits to the study and not overexposed to the study (Grove & Gray 2019:134). The researcher, guided by the principle of justice, ensured the inclusion, exclusion, consent, and transcribing of information is treated with fairness. With regards to the inclusion criteria participants involved in the proposed study were chosen following a set of criteria relevant to the proposed study. Participants not directly linked to the study in terms of age, gender and with no pregnancy loss were excluded. The researcher ensured that information obtained from participants was relevant and entirely the participants view and not the researcher's view. The researcher reflected to participants during the interview, read and re-read the transcripts and involved peer review to read and analyse the data before finalizing the study. The researcher ensured the required standard was met by obtaining consent from the relevant institutions



governing permission to the study such as the University Ethics Committee, the Hospital involved (refer to Appendices B) and the Gauteng Department of Health.

Ethical considerations implemented before COVID -19 were still applicable although the approach in conducting qualitative research has changed. The researcher applied the WHO principles on COVID-19 (WHO:2020). The principles were used in conjunction with guidelines for the implementation of the National Infection Prevention and Control (NIPC) Strategic Framework revised during the COVID-19 pandemic in March 2020 (NIPC Strategic Framework: 2020). Obtaining consent during the pandemic was also affected and the researcher decided to use the guiding principles used for COVID-19 research, as the subjects could not be isolated. Informed consent is a major aspect of conducting research in human subjects and the researcher obtained consent without interfering with restrictions due to the pandemic. Participants gave written and verbal consent prior to the commencement of the study. Where participants could not avail themselves to the setting, the researcher used alternative methods such as telephone calls to prevent delays in meeting the research deadlines (De Vries, Burgess, Blockman & Ntusi 2020:638).

1.11. CONCLUSION

The researcher provided an overview of the study in the first chapter. A detailed discussion of the methods followed is presented in the next chapter.



CHAPTER 2

RESEARCH METHODOLOGY AND APPROACH

2.1. INTRODUCTION

In Chapter 1 the orientation of the research process was presented. The purpose, objective and background of the research study was briefly discussed. This chapter describes the methods and approaches that the researcher used to provide evidence on the research process and reasons for such choices. The aim of the research was to explore and describe the information women receive after recurring pregnancy loss in the antenatal clinic of an Academic Hospital in Tshwane, Gauteng, South Africa. The chapter provides an in-depth discussion of research designs, methodological approach, data collection methods, and data analysis with the aim to answer the research questions. Aspects of trustworthiness and ethical consideration will also be discussed.

2.2. RESEARCH DESIGN

The research design is the plan for gathering information with the goal of discovering knowledge (Brink et al. 2018:104). A qualitative explorative and descriptive design was followed to allow in-depth and further probing as well as questioning participants on their responses. The intention of the study was to explore and describe the information women received after recurring pregnancy loss in the antenatal care setting of an Academic Hospital in Tshwane, Gauteng, South Africa.

2.2.1 Qualitative research

Qualitative research is an investigation of a phenomenon in an in-depth and holistic fashion through rich narrative materials using a flexible research design (Polit & Beck 2017:1040). Qualitative research was found to be appropriate when the primary purpose is to explore, describe and explain processes from a participant's perspective with the goal to gain in depth information about the phenomenon. The explorative and descriptive approach was used to answer research questions.

2.2.1.1 Explorative design

Explorative research is a design that increases knowledge of the field of study and is not intended for generalization (Gray, Grove & Sutherland 2017:1288). In the study the researcher wanted to gain in-depth knowledge about the phenomenon from participants by exploring



'Information women receive after recurring pregnancy loss in the antenatal setting of an Academic Hospital in Tshwane Gauteng South Africa'.

2.2.1.2 Descriptive design

According to Gray and Grove (2019:258) a descriptive design provides the accurate portrayal or characteristic of a person, event, or group in a real-life situation. The focus in the study was to collect accurate information from participants on how they experienced the phenomenon with the aim to describe the result.

2.3 METHODOLOGY

Methodology refers to the general type of research selected to answer research questions (Gray, Grove, & Sutherland 2017:1302). Methodology includes the study setting, population, sampling, data collection and data analysis.

2.3.1 Study setting

The research setting refers to 'a specific area or place where data is collected' (Brink et al. 2018:47S). The proposed study was conducted in an antenatal setting of an Academic Hospital in Tshwane District, South Africa. This setting was selected because of its status as one of the highly recommended teaching hospitals in the district and province. Another reason for choosing the setting is that the proposed research problem was identified by the researcher whilst working in the same setting.

The research commenced at the agreed institution which is an Academic Hospital in Tshwane, Gauteng, South Africa. This hospital is situated in a township called Ga Rankuwa which is North of Pretoria. This hospital renders high risk services to the community of Ga Rankuwa, neighbouring health institutions and provinces such as Northwest and Limpopo. The services include special investigations such as sonography and post-natal reviews after caesarean section as well as management of patients with chronic diseases during pregnancy and post-delivery. The antenatal clinic has 12 consulting rooms plus the admission area whereas the antenatal ward is 40 bedded in capacity. The women are seen at the clinic by midwives and obstetricians. The following statistics apply as per records in the antenatal clinic and admitting ward. For the period of March, April and May 2020, recurring pregnancy loss accounted to 8.7% in over 70 women were seen at the clinic on any allocated day, whereas at the antenatal ward records for the same three months accounted to 4.3% of women seen. According to the clinic records, 21 women with recurrent pregnancy loss were seen in January 2021 whereas



in February 2021, 44 women accessed the services at the clinic. Records of those who come randomly and straight to labour ward in labour and with complications such as eclampsia were not included in the statistics. Approval to conduct the study was granted by the Hospital Chief Executive Officer and the Staff Development prior to data collection (refer to Appendices B). Interviews were conducted in consulting rooms and wards of the same setting.

2.3.2 Population

Population refers to 'a complete set of persons or objects that possess some common characteristics that is of interest to the researcher' (Brink et al. 2018:118). According to Grove and Gray, population is 'a group of individuals or elements in the study, and when elements in the study are people, they are called participants' (Grove & Gray 2019:293). The population in the study were referred to as participants because they are women, and they were the ones telling the story. The participants were pregnant women with recurrent pregnancy loss of two or more and were between the age of 18 to 40 years. Their previous losses were before 24 weeks of gestation, and they had no live babies.

2.3.3 Sampling and sampling plan

Sampling refers to 'selecting a group of people, events, behaviours, or other elements with which to conduct the study' (Gray, Grove & Sutherland 2017:1324), whereas Brink et al. (2018:116) refers to sampling 'as a process of selecting the sample from the population to obtain information about the phenomenon and in the way that represent the study'. The two definitions offered the same idea about what sampling means in the study. The study involved a sampling plan to describe strategies used to obtain the sample of the study. A non-probability purposive sampling was used. In a non-probability purposive sampling the participants who possesses certain characteristics such as being knowledgeable of the culture of phenomenon were selected (Grove & Gray 2019:585). It was impossible to include and access all women with recurrent pregnancy loss therefore a selection was consciously done. Only women who experienced recurrent pregnancy loss participated in the study and was able to articulate more on the subject. The sample size consisted of 20 participants who participated in the study, to maximize the possibility of gaining more information about the phenomenon. Data was collected to a point that no new data emerged during data collection which is called saturation (Brink et al. 2018:128).



2.3.3.1 Inclusion criteria

Inclusion is a criterion whereby sampling requirements are identified by the researcher that must be present for the element or subject to be included in the sample (Gray et al. 2017:1294). Polit and Beck (2017:366) explains inclusion as 'a criterion that specify population characteristics and are also called eligible criteria'.

In the study the sampled participants were chosen as follows:

- Only pregnant women.
- A history of recurrent pregnancy loss of two or more.
- o A pregnancy loss of 24 weeks or less.
- The women should be between ages of 18 and 40 years.
- The women should have no live babies.

2.3.3.2 Exclusion criteria

According to Polit and Beck (2017:366) exclusion criteria is defined as 'characteristics that people must not possess' whereas Gray, Grove and Sutherland (2017:1287) refers to exclusion criteria as 'sampling criteria that eliminates some elements or subjects from inclusion in a research sample, for the purpose of eliminating sample characteristics that have potential to introduce error.'

The exclusion criteria were as follows.

- Women who are not pregnant.
- Women who have had only one pregnancy loss.
- Women who lost babies at viability.
- Women of below 18 and above 40 years.
- Women who have children.

2.4. DATA COLLECTION

Data collection is a series of interrelated activities aimed at gathering information to answer an emerging research question (Creswell & Poth 2018:211). Brink et al. (2018:134) describes data collection as 'a way in which the researcher approaches answering research questions.' Data collection was done through semi-structured interviews. The interviews included a preparatory phase, interview phase and post interview phase. The pilot study formed part of



the preparatory phase because the outcome has brought about changes before collection of data (Brink et al. 2018:45).

The point of departure for the data collection was from the believe that reality is subjective, so each participant was able to answer research questions in view of their information needs. This perspective was derived from the theory that idea points of view have no absolute truth or validity in them, they have only relative value (Liamputtong 2019:1097).

2.4.1 Preparatory phase

The researcher made an appointment with the Unit Manager at the antenatal clinic of the academic hospital to request permission to access the patient register in order to identify participants relevant to the study. The researcher made face to face contact with participants to request permission to participate in the study. The researcher further made arrangements with participants to schedule the interviews. Through verbal arrangements some participants voluntarily provided their contact numbers for further communications regarding the scheduled interviews. The interviews were carried out after their next follow up visit was done to prevent interruption to the service. This approach enabled the researcher to recruit suitable participants for the study and ensured uninterrupted nursing care of patients. Through a brief session, participants were introduced to the study and gave their consent (refer to Appendices C). Participants were also informed of their right to withdraw at any time during the study and that there will be no remuneration for the study. Two participants were part of the pilot study which was done prior to the main interviews to guarantee success towards effective data collection. The results of the pilot study did not form part in the actual study. The researcher used the pilot study to identify challenges that may arise during the main study and improved the questionnaire and equipment used. An audio recorder, writing pads, pens, and a timer were equipment used for data collection in each interview session. This study was done during the COVID-19 pandemic and the researcher ensured that all protocol for COVID -19 were observed by enforcing the following:

- Social distancing of 1.5 meters between the researcher and participant.
- Wearing of masks all the time during the interview.
- Proper hand wash and sanitizing in between interview sessions.
- Ensured that participants had a bottle of water to avoid sharing of cups.



2.4.2 Interview phase

Gray, Grove and Sutherland (2017:1297) defines an interview as 'structured or unstructured verbal communication between the researcher and the subject during which information is obtained from the study.' According to Brink et al. (2018:143) an interview is 'obtaining information from participants in a face-to-face encounter.' Interviews were conducted on a face-to-face encounter.

The researcher as an employee in the same setting ensured there was no service interruption, therefore interviews were scheduled when the researcher was not on duty. Interviews were conducted in a consulting room in the antenatal clinic or ward. The participant contact numbers were obtained from records and personal arrangements with those admitted in the setting. The time scheduled for the interview was 30 minutes. The researcher gained rapport with participants before the interview and ice breaker questions were used intermittently. A semi-structured interview was conducted during the set dates with participants. Privacy was always maintained. English language was used as the preferred medium to ensure communication between the researcher and participants, however, there were five cases where participants used their home language. The researcher allowed them with the aim to promote a relaxed atmosphere and effective communication during the interviews.

The researcher conducted the interviews herself. The researcher ensured participants were pre-screened before actual interview commenced. The venue was cleaned a day before the interview to ensure cleanliness and the researcher disinfected the surfaces after every interview to reduce the spread of infections. Due to the nature of the study individual interviews were conducted to enable the researcher to practice social distancing as per WHO principles (WHO:2020). One and a half meter was maintained between the researcher and participants (WHO:2020). The researcher recommended hand washing with soap and water before and after the interviews. The number of participants was reduced to three per day. The researcher ensured minimal sharing of objects during the interviews by providing each participant with their own pen and pad in case there is a need to write in responding to the questions during the interview. Water as an essential need was available and each participant had their own bottled water during the interview. The disposing of waste used during the interviews was carried out based on the hospital waste management protocol. No eats were offered during the interviews to ensure safety of participants.



The interviews were semi-structured, which enabled the researcher to use the interview guide (refer to Annexure B) as a guiding tool and more probing questions were asked to achieve indepth response from participants. Probing refers to 'obtaining detailed reflective information from a participant to increase the richness of data' (Polit & Beck 2017:1039). During the interview, the researcher maintained eye to eye contact, open ended questions were asked, listened to participants, and paraphrased to obtain more information. Paraphrasing is the effort that the researcher employs to understand participants and to direct quotations for the theoretical content which is part of a scholarly paper (Gray, Grove & Sutherland 2017:1309). The interview sessions lasted between 19 to 41 minutes.

Permission was granted by all participants. The use of an audio recording was to ensure that the researcher could capture the verbatim response of participants (Polit & Beck 2017:85). The use of an audio recorder helped the researcher to have a complete record of the interview and assisted the researcher to promote eye to eye contact with participants.

2.4.3 Field notes

Field notes are notations recorded by a qualitative researcher during and or immediately after data collection (Grove & Gray 2019:573). Field notes represent the researcher to note the participant's observed efforts and to record information, synthesize and understand data (Polit & Beck 2017:737). All participants gave consent to be recorded during the session via the use of an audio recorder before the interview session commenced. According to human rights, prospective participants must give consent to being part of the study and be aware of video/audio recordings. The field notes were observational, methodological and personal.

2.4.3.1 Observational notes

According to Polit and Beck (2017:737), observational notes are objective descriptions of observed events and conversations, information about dialogue and context are recorded as completely and objective as possible. The researcher observed participants during the interview and noted their behaviour and facial expressions changed when asked to reflect back on their experiences of recurrent pregnancy loss. The researcher noted their sad faces and signs of grief while answering research questions. The nature of the research topic was emotional, so participants showed sad emotions during the interview but were also able to communicate and sometimes have moments of laughter inspired by the fact that they were expecting positive outcomes on the current pregnancy. They also showed moments of relief



since they were able to speak about their past experiences and hoping to make an impact to other women who will benefit from the results if the study.

2.4.3.2 Methodological notes

In observational field studies, the researcher's notes about methods used in collecting data are called methodological notes (Polit & Beck 2017:1030). It was further noted in Polit and Beck (2017:737) that methodological notes can also provide instructions on how subsequent observations will be made. Participants were informed about the methods of data collection and analysis and informed consent was obtained from the participants for the use of an audio recorder during the interview. The researcher also allowed participants to be free and informed them that they can terminate the interview at any time without any victimization during the interview session. Participants' information was kept safe to prevent their identity and they were also reassured that the main study will ensure anonymity by using pseudonyms as a substitute to their real names. The researcher also ensured no interruption of service during their ANC follow up visit by confirming the appointments telephonically to meet participants after their follow up visits. The plan assisted in free interaction between participants and the researcher, promoted openness and prevented unnecessary delays to participant schedules.

2.4.3.3 Personal notes

Personal notes are comments about the researcher's own feelings, in the field almost inevitably, field experiences give rise to personal emotions or challenge researchers' assumptions (Polit & Beck 2017:737). Listening to participant's sad moments after pregnancy loss left the researcher feeling emotional and empathetic towards them. However, participants acknowledged being part of the research study in order to raise hope for other women in future pregnancies and that was a fulfilling moment for the researcher. Interviewing participants with recurrent pregnancy loss was a challenge on its own due to the full capacity at the clinic and all daily activities occurring at the clinic While in preparation for an interview session, a staff member asked the researcher to allow her to use the room that the researcher was allocated to by the Operational Manager for the interviews. In respect of continuity of care to allow patient care to continue, the researcher had to allow the patient to be seen in that consulting room. The patient was transferred immediately to the labour ward where she was an emergency patient, which allowed the researcher to continue with the preparations before the participant arrived.



2.4.4. Post interview phase

Post interview phase refers to the period after the interview. The researcher ensured that termination of the interview with participants was done properly to prevent any dissatisfaction from participants. The researcher emphasized to participants that in case they need the intervention of a psychologist, arrangements will be made for a consultation. However, the participants felt that they are looking forward to the current pregnancy and do not need the intervention of a psychologist. Some participant requested to see a psychologist but declined the appointment during the next visit. The researcher also thanked the participants for participating in the research. To ensure the safety of data collected, each interview was properly identified and all audio recordings were labelled to match the interviews. The researcher listened to the audio recordings and checked the audibility and completeness before leaving the interview site (Polit & Beck 2017:729).

2.5. DATA ORGANIZATION

Data is stored in multiple forms such as electronically in the computer and the researcher used a coding system to maintain a secured filling system for all documents of the study (Grove & Gray 2019:117). The organizing started during the interview session where the researcher had to rewrite the notes after each interview. The records were kept in a file named according to participant numbers both electronically and manually in order to keep them manageable. Duplicate notes were made and stored in separate location. A hard copy from all electronic information was made and filed in a different location. All the records were kept in a specific file and always kept safe (Brink et al. 2018:180).

2.6. DATA ANALYSIS

Data analysis is the process of fitting data together and making the invisible obvious to provide structure and elicit meaning from data (Polit & Beck 2017:478). Data analysis reduces, organizes, and give meaning to data (Grove & Gray 2019:568). The researcher used thematic analysis to analyse data collected during the interviews. Analysis of data was done sequentially by transcribing information against an audio recording and documents from participants. In analysing the interview, the researcher followed steps derived from Jason and Glenwick (2016:35). Thematic analysis aligned with a six steps approach were as follows:

Step 1: The researcher began by transcribing the interviews and reading and transcribing repeatedly to look for meaning and patterns with casual note taking of what is important in the



data (Jason & Glenwick 2016:34). The researcher used markers and highlighters to identify important patterns.

- **Step 2:** The second step involved generating of initial codes and was done when the researcher was familiar with the data. This is when the researcher focused on making sense of available data into meaningful units (Jason & Glenwick 2016:34). The researcher used markers and highlighters to identify repetition of codes.
- **Step 3:** The researcher now embarked on theme searching once coding was completed. Materials falling under the same codes were put together to create themes. Smaller themes were put together in broader themes (Jason & Glenwick 2016:35).
- **Step 4:** The fourth step entailed reviewing of themes once a set of potential themes was identified. The researcher here identified themes that were not relevant to the research questions whereas other themes were divided into broader and separated themes (Jason & Glenwick 2016:35).
- **Step 5:** Naming and defining of themes then followed. The researcher named the themes according to the idea they carry. A detailed analysis was made and how it fitted the overall process in the data set (Jason & Glenwick 2016:35).
- **Step 6:** Lastly the researcher provided a report, and the final report was written. In the report it is important that the researcher shows trustworthiness. This was maintained by involving themes that were discussed in the study (Jason & Glenwick 2016:35).

The process started with reading and transcribing each interview repeatedly using highlighting of notes to identify patterns on the records and documents. The researcher ensured that there is a verbatim recording of audio taping and available documents. The researcher continued by familiarizing with the data by generating codes to try make sense of available records. Materials falling under the codes were put together to create themes, these themes were then put together to form broader themes. The themes were then named according to the idea they carry, and a detailed analysis was finally done followed by a written report.



2.7 TRUSTWORTHINESS

The researcher-maintained trustworthiness by following Lincoln and Guba's framework under the following: credibility, dependability, confirmability, transferability, and authenticity (Polit & Beck 2017:785).

2.7.1 Credibility

Credibility is the confidence of the reader about the extent to which qualitative research has produced information that reflects the views of the participants (Grove & Gray 2019:566). Credibility was maintained by transcribing information given by participants and reflected on participant's view without influencing the outcome. Prolonged engagement with participants enabled them to provide more information. Member checking was also done to ensure that the interpretations of the researcher gave an accurate reflection of the participant's view about pregnancy loss.

2.7.2 Dependability

Dependability refers to a demonstration that findings are consistent and could be repeated (Jason & Glenwick 2016:34). Reading and rereading of transcripts were done to ensure dependability. The researcher continuously revisited the collected data and interpretations were done throughout the research to maintain consistency. Verification of content was determined by comparing audio records with field notes. Audit trials were also conducted on all research documents to enable future use of the study.

2.7.3 Confirmability

Confirmability is the extent to which other researchers can review the audit trial of a qualitative study and agree that the author's conclusion is logical (Grove & Gray 2019:566). Confirmability was maintained through member checking to ensure that the information was not only the researcher's view about participants' experiences.

2.7.4 Transferability

Transferability is used in qualitative findings as they are applicable to other settings with similar participants when a study has a thorough description of the sample and reader confidence, credibility, dependability and confirmability of findings (Grove & Gray 2019:593). Transferability was enforced by ensuring there is a detailed description of the research processes about the phenomenon under discussion to prevent any misrepresentations and speculations that may arise. The content of the published research will also be open to other



researchers by providing clear information about participants, their different settings, and a dense description about the phenomenon on discussion. This will enable other researchers to compare the results with their own settings and give opportunity for more research to be done.

2.7.5 Authenticity

Authenticity can be established by ensuring that the research is context rich and has meaningful descriptions (Brink et al. 2018:111). In maintaining authenticity, the researcher ensured that the results were truthful and displayed multiple versions of reality as displayed by participants in the study as well as being culture sensitive.

2.8. ETHICAL CONSIDERATIONS

Ethical standards were followed throughout the study. Ethical considerations in research are related to as 'protection of human rights and social beings' (Brink et al. 2018:28). The researcher obtained ethical approval from the University of Pretoria (refer to Appendices A) and permission from the setting where research was being conducted (refer to Appendices B). Informed consent from the participants was obtained before the study commenced (refer to Appendices C). The participants were guaranteed complete confidentiality and anonymity throughout the study. Interviews were held in a private room of the setting to promote relaxation of participants. Participants were treated as autonomous agents and could choose to withdraw at any time during the study. Ethical considerations are discussed in detail in Chapter 1.

2.9. CONCLUSION

This chapter provided a detailed explanation of the research methodology used in the research process. It is an overview of principles used and emphasis were made on data collection, population, sampling, and data analysis. The criteria for evaluation of research as well as ethical consideration(s) were also discussed. Interpretation of data will be discussed in the following chapter.



CHAPTER 3

DISCUSSION OF FINDINGS AND LITERATURE REVIEW

3.1. INTRODUCTION

The previous chapter outlined the research design, methodological approach, data collection and analysis with the aim to answer the research questions. The aspects of ethical consideration were also discussed. This chapter outline the findings and analysis of the collected data supported by recent evidence from literature. A qualitative research method was used as outlined in chapter 2. The purpose of the study was to explore and describe the information needs after recurrent pregnancy loss in an Academic Hospital in Tshwane, Gauteng, South Africa. The participants in the study were asked to answer the research question "What information did you receive after recurring pregnancy loss?" The findings are presented in a table form which entails the demographic details of participants and themes and categories as it emerged from the data collected. Excerpts from raw data were presented to support and provide rich description of the thematic analysis (Polit & Beck 2017:106).

3.2. DEMOGRAPHIC PROFILE OF PARTICIPANTS

The participants who were selected to participate in this study were pregnant women with a recurrent pregnancy loss of two or more. Sampling included 20 pregnant women with a history of previous pregnancy losses. The women were interviewed in an interview session that lasted between 19 minutes and 41 minutes. Data were collected until data saturation was reached at 20 interviews (refer to chapter 2). The demographic profile of the participants is discussed in terms of gender, age, language, the number of pregnancy losses and an overview of the participant's sample is also displayed.

The demographic information of participants is presented in Table 3.1.



Table 3.1: Demographic information of participants

Criterion	Characteristics	Participants
Gender	Females	20
Age	18-22	1
	23-27	9
	28-32	5
	33-37	4
	38-40	1
Language	English	15
	Setswana	5
Pregnancy losses	2	10
	3	7
	4	2
	5	1

According to Table 3.1 the study included only 20 female participants who have a history of pregnancy loss. Participants between the ages of 18 to 40 years were selected to participate in this study (view chapter 2). Women between the ages of 23 to 27 years were the largest group of participants, while the smallest group were derived from participants of ages 18 to 22 and 38 to 40 years respectively.

Most interviews were conducted in English, and a few were in Setswana. The researcher being fluent in both Setswana and English was able to translate from Setswana to English. To maintain trustworthiness of the data collected, an English teacher was consulted with the data to confirm correctness of the translations made.

A description of number of pregnancy loss per participant will be displayed in Table 3.2.



Table 3.2: Sample overview

Participants	Age	Number of pregnancy
		losses
P 1	34	05
P 2	32	03
P 3	30	03
P 4	34	03
P 5	32	02
P 6	32	03
P 7	20	02
P 8	38	02
P 9	26	03
P 10	23	02
P 11	26	02
P 12	25	03
P 13	25	02
P 14	30	02
P 15	25	02
P 16	35	04
P 17	36	04
P 18	25	02
P 19	24	02
P 20	23	03

Table 3.2 above, displays a description of the sample included in the current study. The study included 20 pregnant women between the age of 18 and 40 according to the inclusion criteria (refer to chapter 1). All participants have a history of pregnancy loss as displayed in the table. Most participants had two pregnancy losses followed by some participants with three pregnancy losses. Two participants had four pregnancy losses and only one participant had five pregnancy losses. The relationship between the age of participants and the number of pregnancy losses was not established in this study.



3.3 THE PROCESS OF DATA COLLECTION AND ANALYSIS

Data was collected in the ANC of an Academic Hospital in Tshwane, Gauteng, using individual interviews to explore and describe information women received in the ANC from 20 pregnant women who experienced pregnancy loss with previous pregnancies. The researcher accessed information from the ANC register with permission from the Unit Manager and through participants when requesting them for participation in the study. Participants interested in participating in the study upon request voluntarily provided contact numbers for further communication before the interview. Participants were then called telephonically to meet at the ANC whereas others were selected through face-to-face individual contacts during their admission in the ANC. Interviews took place in the consulting room at the clinic and the wards, and the researcher ensured that no service was interrupted during the interviews. Audio recordings were used during the interviews after the participants approved and signed the informed consent form (refer to Annexure C). All Covid-19 protocols were strictly adhered to during the interviews, participants were encouraged to wear face masks and sanitize their hands during the interview and social distancing was maintained (refer to chapter 2).

Data analyses were used following the six approaches of thematic analysis as outlined in Jason and Glenwick (2016:33). The researcher familiarized herself with the data and focused on making sense of the information to have meaningful units, searching for themes, and grouping of information into categories when falling under the same codes. Themes and categories were formulated with the help of an independent coder and the supervisors. The themes were reviewed and labelled according to the central idea it reflected.

In this study the following eight themes emerged from the findings:

- Experiences of recurring pregnancy loss.
- Information received after pregnancy loss.
- Benefits of receiving information after recurring pregnancy loss.
- o Barriers to receiving information after recurring pregnancy loss.
- o Perception of intervention to prevent pregnancy loss.
- Perception of information to prevent pregnancy loss.
- Perception of sources of information after pregnancy loss.
- o Recommendations for receiving information after recurring pregnancy loss.



3.4 OUTLINE OF THE RESULTS

Table 3.3 below outlines the themes and subthemes from the transcribed data based on the information women receive after recurrent pregnancy loss.

Table 3.3: Themes and subthemes

THEMES	SUBTHEMES				
3.4.1 Experiences of recurring	3.4.1.1 Experiences of recurring pregnancy loss				
pregnancy loss	3.4.1.2 Emotional experiences of recurring pregnancy loss				
	3.4.1.3 Social experiences of recurring pregnancy loss				
	(positive/negative)				
	3.4.1.4 Coping with recurring pregnancy loss				
	3.4.1.5 Perceptions of causes of recurring pregnancy loss				
3.4.2. Information received after	3.4.2.1 Insufficient/unhelpful information				
recurring pregnancy loss	3.4.2.2 Possible causes of recurring pregnancy loss				
	3.4.2.3 Interventions to prevent future pregnancy loss				
3.4.3. Benefits of receiving information	3.4.3.1 Prevention of recurring pregnancy loss				
after recurring pregnancy loss	3.4.3.2 Prevention of emotional stress/fear/guilt				
3.4.4 Barriers to receiving information	3.4.4.1 Health care providers' unconducive attitudes				
after recurring pregnancy loss	3.4.4.2 Other barriers				
3.4.5 Perceptions of interventions to	3.4.5.1 Early antenatal bookings				
prevent pregnancy loss	3.4.5.2 Early detection of potential problems				
	3.4.5.3 Virtual support/information				
3.4.6 Perceptions of information to	3.4.6.1 Written/printed information				
prevent pregnancy loss	3.4.6.2 Health education/information from midwives				
3.4.7 Perceptions of sources of	3.4.7.1 Medical practitioner				
information after recurring pregnancy	3.4.7.2 Midwives				
loss	3.4.7.3 Virtual media				
	3.4.7.4 Counselling				
	3.4.7.5 Other sources				
3.4.8 Recommendations for receiving	3.4.8.1 Health education regarding pregnancy loss				
information after recurring pregnancy	3.4.8.2 Preferred time to receive information				
loss	3.4.8.3 Peer group information/support				



Each theme and subtheme reflected in Table 3.3 is discussed and supported with evidence from the literature.

3.4.1 Theme and subthemes for recurring pregnancy loss

Recurring pregnancy loss is defined as 'spontaneous end of pregnancy before the fetus has reached viability and encompasses all losses from until 20-24 weeks of gestation' (Dimitriadis, Menkhorst, Saito, Kutteh & Brosens 2020:1). According to the Eshre Guideline Recurrent pregnancy loss update (2022:12) recurrent pregnancy loss is defined as the loss of two or more pregnancies. Pregnancy loss (miscarriage) is defined as 'spontaneous demise of a fetus before pregnancy reaches viability' (Eshre Guideline Recurrent pregnancy loss update 2022:12). For the purpose of this study the researcher chose the term 'pregnancy loss' instead miscarriage or abortion due to its relevance to the topic. Under theme 1, recurring pregnancy loss, six subthemes will be discussed.

Table 3.4: Theme 1 and associated subthemes

THEME 1	SUBTHEMES				
3.4.1 . Recurring pregnancy loss	3.4.1.1 Experiences of recurring pregnancy loss				
	3.4.1.2 Emotional experiences of recurring pregnancy loss				
	3.4.1.3 Social experiences of recurring pregnancy loss				
	(positive/negative)				
	3.4.1.5 Coping with recurring pregnancy loss				
	3.4.1.5 Perceptions of causes of recurring pregnancy loss				

3.4.1.1 Experiences of recurring pregnancy loss

The experiences of recurrent pregnancy loss emerged during probing where the researcher attempted to generate in-depth explanations regarding recurrent pregnancy loss as the baseline information for the research topic. One participant elicits this statement by saying:

"Yes, I understand maybe after I reach four months and then I start to have it and then I don't even notice anything, it happens through pain" (P18).



"Everything was right with this one but after some days I came back from the hospital then I miscarried" (P1).

"Me is like I'll say like this the three miscarriages they probably happened at a notice, short period of time probably the same, 2017, 2018 and 2019" (P3).

"Then I went to ANC when I reach at ANC they told me the same thing my weeks don't allow me to come to ANC I have to go back to the gynae clinic again". (P10). She went on by saying: "Yaa, then I had to sort of look for their attention so that they can attend to me cos I couldn't take it anymore and by that time they took me to the consultation room I think I was in active labour" (P10).

In responding to their experiences participants mentioned how their pregnancy loss was sudden and without notice in subsequent pregnancies. The symptoms felt by participants were similar in that the remarks were as follows:

"Yes, when I found out that was pregnant around January then everything was fine then I started having stomach cramps then I started bleeding heavily bleeding I thought it was my period or something but then only to find out when I went to the doctor, they told me that ehh I had a miscarriage" (P9).

"I just uhh had something heavy coming from my vagina" (P3).

"I will bleed and then after that I went to hospital that's where they told me that I am pregnant around 12 weeks" (P11).

The participants shared how they experienced the loss of their pregnancies which according to them was sudden and without notice. They also explained how they perceived that the pregnancy was going well, having positive expectations. Kukulskienė and Zamaitiene (2022:4) suggested that the onset of spontaneous pregnancy loss (abortion) and news of a non-viable pregnancy were subjectively related to a shock reaction. A large tertiary-level maternity hospital in Ireland, participants expressed how they had suspected something was wrong but had no knowledge of what to expect in pregnancy loss (Meaney, Corcoran, Spillane & O'Donoghue 2017:4). Some participants also mentioned that they were not aware that they were pregnant until it was confirmed by the doctors when they arrived at the hospital. Baird et



al. (2018:113) reported similar findings where participants reported that they found out from the doctor about their pregnancy loss.

In response to their experiences, participants reported the symptoms they had before and during the pregnancy loss which displayed some similarities. Participants mentioned symptoms such as stomach cramps, pain, heavy bleeding. Participants in Meaney et al. (2017:5) discussed that they were unprepared for the extent of bleeding during a pregnancy loss. According to Sapra, Joseph, Galea, Bates, Germaine, Louis, and Ananth (2017:509), bleeding is a consequence of a loss as the bleeding occurs with expulsion of a product. In the study by Kukulskiene and Zamaitiene (2022:6), participants were frightened by the intensity of the bleeding and described pregnancy loss a continuous, painful, and complicated process. A participant shared how she was sent around while seeking care during the pregnancy loss to an extent that she demanded attention as she was in pain. In a study by Norton and Fuber (2018:7), a participant reported to be so humiliated by the whole experience that she could not elaborate further.

3.4.1.2 Emotional experiences of recurring pregnancy loss

Emotional experience of recurring pregnancy loss emerged as the second theme. Previous pregnancy loss is associated with emotional problems such as stress during subsequent pregnancies (Cunha, Santana, Gribel & Faus 2019:416). The women explained their emotions regarding the pregnancy loss. Throughout the interviews the women expressed how they felt after they lost the pregnancy and exposed that the pregnancy loss experiences were emotionally straining.

"No, I don't think I need counselling now uhh am just stressed for now since am expecting the baby soon" (P17).

"And it's not easy cos you do that then the next thing maybe you come across someone who's pregnant and your mind just goes back to everything you know" (P14).

"Even now I cannot say I was ok cos I was. I am always scared and am not supposed to be scared especially in my condition you understand" (P18).



"Cos everything just happens so quickly. Yes, and one minute here you are thinking that you gonna have a baby, you are excited, the next things like this happen then it's devastating I don't want to lie". (P9).

The findings of the study revealed that participants were stressed since they are pregnant again after the previous loss. In a study by Baird et al. (2018:116) the findings indicated that participants reported that stress and perceived judgement might have affected their pregnancy. The findings by Tavoli, Mahomadi, Tavoli, Moini, Effatpanah, Khedmat and Montzevi (2018:1) suggested that women with a history of recurrent pregnancy loss experienced increased depressive symptoms and may be at risk of negative psychological effects. According to Campillo, Meaney, McNamara and O'Donoque (2017:6), there is a potential risk that women who have experienced pregnancy loss may be experiencing aggravating stress levels in subsequent pregnancies.

Participants expressed further that they are scared and worried that this might affect the current pregnancy. According to Pillarisetty and Mahdy (2021:8) recurrent pregnancy loss carries a great deal of frustration, and couples are continuously aspiring to achieve a successful pregnancy and are simultaneously afraid of miscarrying again.

Participants reported that their experience of pregnancy loss has left them devastated even when they see other pregnant women or other women are holding their own babies. They felt scared and hoped that they can also have their own babies. The findings in other studies revealed that pregnancy loss is a traumatic period marked by intense struggle between despair, hypervigilance of pregnancy symptoms and bracing for another pregnancy loss (Bailey, Bolvin, Cheong, Reynolds, Balley & Macklon, 2019:7). Meaney (2017:1) reported that she has met an astounding number of women dealing with similar devastating pregnancy losses, that each experience is different, and each is incredibly difficult.

3.4.1.3 Social experiences of recurring pregnancy loss (positive/negative)

Social support is defined as 'verbal and nonverbal communication between recipients and providers that reduces uncertainty about a situation, the self, others, or the relationship and functions that enhances a personal perception of formal control in one's experience' (Alqassim, Kresnye, Siek, Lee, & Wolters 2022:2). According to Campillo, Meaney, McNamara and O'Donoghue (2017:2) experiences of pregnancy loss may alter women's psychological



and mental wellbeing. Social experiences involve interaction with own family, peers, and the society. In this study social experience is interacting with other people that could be friends, relatives, or members of a particular community. It is important that the women can share emotions about their social experiences whether it is negative or positive.

"Ohk like as you say uh, I was pregnant, and just out once it happened that's where I went to church then they told me that you were pregnant so that time like I did get an eh lot of eh counselling" (P3).

"Family, God support from my family my faith in God and my partner and my close friends, those were my supportive structure, people who always say it's gonna be fine" (P9).

Among the participants were those women who experience stigmatization by community due to recurrent pregnancy loss. One participant expressed that:

"Yaa its trauma. People will be asking ehh ngwana o kae [People will be asking where is the baby], you understand, and you don't "(P18).

"Yaa nna le nna [Yes even me] like right now I don't speak to my siblings because when I had a miscarriage, yaa the stillborn the things they said they [kinda] [kind of] like made me shutdown, I don't want that in my life" (P12).

The quotes illustrated that some participants have utilized social relationships with relatives and members of the community and churches where they received positive responses with regards to their recurrent pregnancy loss. The findings of a study on pregnancy loss use quotations that suggested spouses, family, acquaintances, and physicians have tried to comfort women who have just lost their pregnancies (Omar et al. 2019:5). Interacting with people on pregnancy loss also aided the participants in positive thinking about the current pregnancy. In a study conducted by Ibrahim, Al-Awar, Neyeri, Jefout, Ranjbar and Moghadam (2019:309), findings were similar to those suggested by participants in the current study to show that, social support from spouses, relatives and friends play an important role in helping women with recurrent pregnancy loss achieve adaptability on the loss of pregnancy. However, some participants received negative responses from community members and relatives in the form of blaming them that they caused all the miscarriages and are not able to bear children. They felt that they could not fulfil their expected gender role in their families. In a study by



Omar et al. (2019:1) women reported feelings of guilt and culpability for what has happened, particularly when aspects of societal blame and stigma are involved.

3.4.1.4 Coping with recurring pregnancy loss

Iwanowicz-Palus, Maroz, and Bien (2021:4) suggest that coping with difficult situations is affected by several factors, including self-efficacy defined as 'individual belief about ability to achieve their objectives in a particular life situation.' The participants in coping with pregnancy loss revealed the following:

"Ahh [nna] [I] just receive, ahh I just told myself [gore] [that] ahh this thing will pass I am not the first one [ebile] [and] the last one it happens. I can see lot of women they try mm ehh then I just tells myself that at least that I can be pregnant and there's other women who can't even conceive" (P11).

"And I did not want to talk about it. I did not want people asking me questions. I isolated myself" (P14).

"But at that time I've what I, at that time it hit when I look back when I look back right now I see now that if it was not for God I wouldn't be who I am today" (P9).

"Yes, my sister just knew like a few weeks back when I was referred because she was surprised why we been referred to the hospital. I just gave her the maternity record she checked and was like I didn't even know you had any miscarriages" (P13).

Suggestions from the above quotes illustrates how participants coped with recurrent pregnancy loss. Some expressed how they hoped for a successful pregnancy when they conceive the second time. They expressed their hopes as having faith that the following pregnancy will survive. However, Bailey et al. (2019:5) reported that participants in an attempt to prepare for the worst, were reluctant to share news on their pregnancy, suppressed any hope for a successful pregnancy, and avoid thinking about a future with their own unborn child.

Some participants in this study expressed how they accepted the loss and made peace with losing their pregnancies. In a study about her own experience on pregnancy loss, McAlearney (2017:2) indicated that throughout her own experience with pregnancy loss it had been difficult to accept that she is part of the large statistical minority for whom the miracle of life fails to materialize. Alqassim et al. (2022:8) found the main coping strategies by participants to be



acceptance of pregnancy loss where participants indicated that they have learned to live peacefully with the experience. A review of women who experienced pregnancy loss and were referred for therapy, found that one of the approaches, namely mindfulness, helped women to have realistic hopes, find meaning, courage, and optimism in improving their quality of life and emotional state (Lordachescu, Vladislav, Paica, Gica, Ponaitescu & Gica 2021:443).

Some participants used their cultural and religious believe that God's will happened. This is supported in Ormar et al. (2019:5) where all participants felt that pregnancy is an ordeal chosen by God. In a study on Arab Emirates women, participants emphasized the importance of religious beliefs regarding adapting to pregnancy loss. The findings further indicate that women attributed the cause of pregnancy loss as God's will (Ibrahim et al. 2019:309).

The findings in the study suggested that women with pregnancy loss chose not to talk about pregnancy loss when people asked them. This indicates that participants felt that not talking about pregnancy loss will protect them from the shame directed by society, hence they isolated themselves from society. Participants in a study by Ormar et al. (2019:6) suggested that pregnancy loss is a good topic for gossip, so avoiding the conversation and not sharing, helps. Some participants in a study undertaken by Fernandez-Basanta, Van, Coronado, Torres, and Movilla-Fernandez (2019:11) indicated that women used avoidant behaviour mostly to anticipate negative responses and lack of support from others. In contrast to the study by Fernandez-Basanta, participants mentioned that simply talking to someone about what they are going through helped them to cope well with both physical and emotional effects after pregnancy loss. However, Algassim et al. (2022:8) and Bellhouse et al. (2018:6) highlighted that those women strongly felt the need to speak about pregnancy loss in the wider community to feel less alone and stigmatized by their experience. While participants in this study managed to adapt to pregnancy loss in their lives, participants in Balley et al. (2019:4) found it difficult to use strategies to cope with pregnancy loss as they found themselves as having no idea of what would happen in the next pregnancy.

3.4.1.5 Perceptions of causes of recurrent pregnancy loss

Perceptions refers to the ability to see or hear or understand something (Oxford Mini School Dictionary 2018:431). According to Coomarasamy, Dhillon-Smith, Papadopoulos, Al-Mehar, Brewin and Abrahams (2021:1675), women and their partners have uncertainties about the cause of pregnancy loss and the likelihood of recurrence and treatment that could prevent a



recurrence. In this study the participants perceived causes of recurrent pregnancy loss according to their self-knowledge or information gathered by their own understanding of pregnancy loss as well as information from health professionals or social media. The following quotes expressed their understanding of the causes:

"I believe it might be much helpful cause I believe [lenna] [myself] I didn't give my body much time to heal or something like that, I don't know but then from my point of view I believe I didn't give myself time to rest" (P10).

"So, we were holding heavy weight, like maybe I thought it was the cause if miscarriages that I have" (P3).

'You understand I was not mistreated or had anything uhh question marks or what happened or what it just happened naturally" (P18).

The findings in the study indicated that participants perceived that pregnancy loss happened because they did not allow the body to heal after pregnancy loss. Duman, Ozan, Derya, and Tashan (2020:1) suggest that women who become pregnant after pregnancy loss question whether their bodies would be functional to give birth again. The findings in Tyagi, Hamaouda, and Adeya (2021:382) indicated that there are many causes that may lead to pregnancy loss like routine activities such as carrying heavy objects, mental status, and behaviour.

Participants went further by reporting that miscarriage might have been caused by carrying heavy weights at home and at work. Bishra, Abdelhadi, Alserehi, Alansari, Almojel. Alhindi, Malebary, Basheer, Yamani, Almojel, Abohasel, Abutaleb, Mahdi, Sait, Alotaibi and Mustafa (2021:326) suggest that restrictions in strenuous labour, travel as well as sexual activity should be adopted as measures to reduce the likelihood of recurrent pregnancy loss. Similar findings in Omar et al. (2019:5) indicate that women are expected to take it easy and reduce work around home and outside their home due to transgressing norms that they might have that could have caused their pregnancy loss.

Some participants in the study believed miscarriage happened due to natural cause. El Hachem et al. (2017:331) stated that almost half of the pregnancy loss cases remain unexplained for which various treatments are continuously being developed.



3.4.2 Theme and subthemes for information women receive after recurring pregnancy loss

Information women receive after recurrent pregnancy loss emerged as the second theme in the study and is also the main theme in the current study. The theme consists of three subthemes (see Table 3.5) which will be discussed using participant quotes and supporting literature.

Table 3.5: Theme 2 and associated subthemes

THEME 2				SUBTHEMES		
3.4.2. Information received after		after	3.4.2.1 Insufficient/unhelpful information			
recurring pregnancy loss				3.4.2.2 Possible causes of recurring pregnancy loss		
		3.4.2.3 Interventions to prevent future pregnan		3.4.2.3 Interventions to prevent future pregnancy loss		

3.4.2.1 Insufficient/unhelpful information

Insufficient or unhelpful information has a huge influence in determining the information women need during pregnancy and to prevent future pregnancy losses. In this study participants verbalized that information received on pregnancy loss in the clinics and hospitals was insufficient or not helpful. Participants voiced their dismay:

"Truly speaking I did not get any information because they only told me about 9 to 10 days pregnancy thing and then they told me that [baile go ntlina womb ba ntire] [they are going to do womb scrub] and then I can try again" (P2).

"I didn't receive too much information because it was like uhm, I didn't receive enough information like what I was expecting" (P17).

"Yaa all along all those other ones they just say no, wait until your loss three pregnancies so I couldn't say I did receive enough information which can help me" (P17).

"The information was it was lack of information cos they didn't explain what was happening. They told me about high blood that was the first one, the second there was no explanation, but my baby was too small I couldn't, to my understanding it was a premature" (P8).

"Ok, with the five miscarriages, the two miscarriages, the three of the miscarriages I was not told what was happening it just before eight weeks" (P12).



'I didn't receive much information because they were just cleaning up and everything. They wouldn't even tell you what the problem is' (P13).

"Mm, they used to review my treatment always I come to gynae they don't do anything they just check me, put a finger in my vagina, the students not the doctor they, they give me review treatment again. I have to come again for nothing they just give me the same pills" (P4).

"Maybe they write in the file but me I can't read the doctors" (P4).

Participants in the study suggested that the information provided was not enough and not relevant to pregnancy loss, hence they referred to the information as vague. Women in the United Kingdom claimed that nurses offered vague information which becomes difficult to understand (Norton & Fuber 2018:5).

Some participants commented on how health professionals do not communicate when writing reports in their files. They perceived that the information may have been written in the files but have not been given to them. A study on information needs for women after pregnancy loss based on bereavement suggested it is important to provide participants with information they can be able to process on their own, and believe that a two-way discussion between a person experiencing pregnancy loss and the health care professional is required (Austin, Littlemore, McGuinnesse, Turner, Fuller & Kuberska 2021:185).

The participants reported that they did not receive information or the information they received was unhelpful to them. Some of the participants were even told to come back when they have lost two pregnancies. The suggestions by participant quotes reflect that most participants were not satisfied with the information provided by health professionals. Participants from a study by Sereshti, Nahidi, Simbar, Ahmaudi, Bakhtiari and Zayeri (2017:2010) indicated that health care providers should give convincing information about the cause of their loss, but most of them did not receive the necessary information from doctors and other members of the health care team. In another study participants felt that they lack a guiding hand and that they were not given a starting point to find resources and felt isolated in their attempt to gather accurate information (Kresnye et al. 2020:93). Engel and Rempel (2016:56) found that registered nurses were less likely to mobilize support and provide information to women with recurrent pregnancy loss.



3.4.2.2 Possible causes of recurring pregnancy loss

It is important for women with recurring pregnancy loss to know what led to the loss of their pregnancies. Before trying to conceive again most couple want an explanation of their losses and treatment that will prevent recurring pregnancy loss (Eshre Guideline Recurrent pregnancy loss update 2022:16). The possibility of women to cope with pregnancy loss lies within the understanding of their condition and knowing which strategies to engage in to prevent complications and loss during the next pregnancy. Through the next quotes, the participants envisaged the following causes of pregnancy loss:

"Ya physician yes, she was the one who told me gore [that] hey you had blood loss during the c-section, because I had the emergency c-section. You had blood loss and you're the way your placenta it attaches, that's how itself that's how in a way the baby stopped breathing. That's the only thing that I know but they never did an autopsy to actually figure it out maybe there was other things that they didn't see" (P12).

"But the only thing that I think I have received its maybe an infection or something like that" (P10).

"Mm, one of the doctors advised me that I've got a low blood so that's why I can't be able to carry the child for a long time" (P20).

According to participants some medical practitioners were able to share information that led to the pregnancy loss which enabled the participants to understand the reasons that caused the losses. Among the causes mentioned were blood loss, hypertension, infections, anaemia or "low blood", and cervical incompetency. According to Sapra et al. (2017:509) bleeding may be a cause or a consequence of pregnancy loss. The rate of infection in recurrent pregnancy loss is unclear and any infective agent can cause recurrent pregnancy loss (Abdelazim, Aufaza, Purohit & Farag 2017:207). However, Bishrah et al. (2021:328) suggest that chronic infection in an immunocompromised patient is the most prominent risk factor to recurrent pregnancy loss. WHO (2016:40) indicates that hypertensive disorders are an important cause of maternal and perinatal mortality.

One participant was told to stop smoking during pregnancy as it predisposes her to pregnancy complications which may include pregnancy loss. Huan et al. (2016:61) confirmed the association between maternal smoking, increased amounts of maternal smoking and the risk



for miscarriage. Bishrah et al. (2021:326) also suggest that nicotine intake is linked to poor maternal and neonatal outcomes. However, evidence is insufficient to confirm the association between maternal cigarette smoking, caffeine consumption and increased risk of spontaneous miscarriage (Abdelazim et al. 2017:21).

The quotes illustrate that participants have knowledge about the causes of recurrent pregnancy loss, however, some participants reported that they did not receive information at all. The participants indicated that they encountered some level of dissatisfaction regarding the information given to them by health care professionals. In a study by Baird et al. (2018:117) some women with recurrent pregnancy loss mentioned that they received treatment without any explanation of what happened. According to a study by Koert et al. (2019:294), several participants discussed how information provided after multiple pregnancy loss could assist them with decision making about treatment and future pregnancy loss.

3.4.2.3 Interventions to prevent future pregnancy loss

The participants had their own view on how future pregnancy losses can be prevented and the following were their remarks:

"Yaa now they did do cerclage [strong stiches used to close the cervix to prevent pregnancy loss] now. So I was wondering why they didn't do cerclage before, but they did explain to me, say that they couldn't do the cerclage because the only reason why they do cerclage is when my cervix is open. So this time the cervix it was open that's why they do cerclage" (P17).

"So, the second one that's where they told me that next time when you get pregnant you must not come to [ne ele mo ne ele ko Odi] [it was in Odi Hospital]. The next time when you get pregnant' you other must straight go to George Mukhari because it's their specialty, and Odi don't deal with such specialties, so Dr George Mukhari will discover a problem when it's still small" (P5).

So that's why [ge ke le mo seteiging se ke leng mo sona nou] [So that's why when I am at this stage, I even have a cerclage] they, I even have a cerclage (P18).

Some participants in the study indicated that they were informed by the medical practitioners that interventions such as cerclage will be done to prevent pregnancy loss. Participants indicated that with a previous pregnancy loss medical practitioners indicated there was no



need for the intervention. Cerclage is defined as a technique of stitching the edges of an incompetent uterine cervix together with non-absorbable sutures to prevent spontaneous abortion (Blackwell's Nursing Dictionary 2014:116). According to the Eshre Guidelines Recurrent pregnancy loss update (2022:127), cervical weakness is believed to be the causing factor for pregnancy loss in women experiencing recurrent second semester pregnancy loss, but this association is completed by absence of a consistent definition or diagnostic criteria. Similar findings that emerged in the study by Chung, Seungmee, Changho, Jang, Bae, Kwon, Kwon, Shin and Cho (2021:1) indicated that cervical cerclage is an effective surgical procedure for the prevention of miscarriage (pregnancy loss) due to cervical incompetency.

Some participants mentioned that they did not have a cerclage with the previous loss, however they understood when given an explanation that cerclage is done only when the cervix opens before the foetus reaches viability. The findings of a study on pregnancy loss reflect those participants felt their health care providers should have acted sooner for a workup, treatment, or management plan (Shree, Hatfield-Tamajchy, Brewer, Tsigas & Vidler 2021:9). Participants in the study indicated that some interventions were not done with previous losses, and they were told to come for the intervention in subsequent pregnancies. Participants in a study conducted by Meaney et al. (2017:5) believed that other interventions were not done unless they are experiencing recurrent pregnancy loss, this dissatisfaction may be heightened in women who felt other risk factors such as maternal age should be considered.

3.4.3 Theme and subthemes for benefits of receiving information after pregnancy loss

The benefits of receiving information after pregnancy loss emerged as theme 3. Women with recurrent pregnancy loss need information to prepare for future pregnancies. According to Coomarasamy et al. (2021:1675) researchers suggest that women with recurrent pregnancy loss can benefit from the midwifery led continuum care model which ensures that women know when, where, how to access care and help they need, and encourage positive lifestyle interventions that might benefit and encourage early referral in subsequent pregnancies. Theme 3 and subthemes are depicted in Table 3.6.



Table 3.6: Theme 3 and associated subthemes

THEME 3	SUBTHEMES
3.4.3. Benefits of receiving information after	3.4.3.1 Prevention of recurring pregnancy loss
recurring pregnancy loss	3.4.3.2 Prevention of emotional stress/fear/guilt

3.4.3.1 Prevention of recurrent pregnancy loss

Prevention of recurring pregnancy loss refers to measures that can be taken to prevent future pregnancy loss. Participants explained how receiving information can prevent recurrent pregnancy loss:

"Cos I believe so if we, we have much more information may be well knowing more why miscarriages happens neh and then ehh how to take care of yourself maybe after losing the baby or what steps you need to take so that you can make sure that next time you deliver ehh the baby safely" (P10).

"Yes, I think so because if you got eh some information knowledge so they will be teaching you on how to prevent such problem to be happening again so" (P3).

"What the problem is you can know which steps to take after losing the pregnancy Yes, I do feel that we need information after pregnancy loss, so you can know" (P13).

"I feel like I can be positive anyhow, you understand I had a problem that the doctors and the nurses are trying to eradicate that problem that the womb was the problem. Now they made sure this time we keeping the baby safe and then we going to do cerclage" (P18).

Participants agreed that receiving information of measures to prevent pregnancy loss is important. The participants suggested that given information on pregnancy loss could prepare them for future pregnancies. According to Alqassim et al. (2022:9), participants wanted timely information after recurrent pregnancy loss and suggested that stories on what to expect next or at least referral to other resources will help them navigate the pregnancy loss.

Participants also acknowledged the efforts taken by health professionals to identify the cause and manage them in subsequent pregnancies. According to Pillarisetty and Mahdy (2021:7), the best possible outcome of pregnancy loss cannot be achieved without the active role of every member in the interprofessional team helping women with recurrent pregnancy loss to



make informed decisions about their care. Lordachescu et al. (2021:443) stated that women who experienced a miscarriage want to know what to do to prevent future losses and how long they can wait before trying to conceive again. The doctors in the same study recommended women should wait three months to reduce the chance of another miscarriage. In a study by Pang, Temple-Smith, Bellhouse, Trieu, Kiropoulos, Williams, Coomarasamy, Brewin, Bowles and Bilardi (2018:121), participants used information they received to learn more about pregnancy loss and try to minimize the risk of miscarriage in subsequent pregnancies.

3.4.3.2 Prevention of emotional stress fear and guilt

Stress can originate from a wide range of circumstances and is defined as 'any situation that overwhelms our ability to cope' (Qu, Wu, Zhu, Barry, Ding, Baio, Muscat, Todd, Wang & Hardiman 2017:4). Health care providers should take measures to assist women who have suffered pregnancy loss to relieve the distress and anxiety conditions when they encounter pregnancy loss (Wang, Jianyin, Qian, Mao, Li, Li, Dai, Jianing, Cao, Zhang, Chen, Jin, & Yi 2021:8). Pregnancy loss is always accompanied by stressful events. Women considered themselves as being unlucky in this situation and fearful having thoughts that it can happen again. Some women experience guilt, they think that it is their fault that they are losing the pregnancy. The participants responded as follows when probed about their emotional stress, fear, and guilt:

"I believe like you know getting to speak to somebody and let them know what's happening what happened to your situation thought nna [I] praying gore [that] there is hope" (P12).

"Cos it hurts to go to the hospital and then you come back again, something happened but you can't even tell your next of kin that it was the cause of this what was the cause of what, you are also clueless yourself, you see, you even scared. I was even scared to fall pregnant again cos I didn't know what happened" (P10).

"I think it will be helpful because of you won't think too much about it because I already got the information about what happened unlike without getting information so I think it will help" (P11).

Participants shared their emotions regarding pregnancy loss and their views on how this emotional trauma can be prevented. The participants indicated that after pregnancy loss the women experiencing the loss would like to speak to someone and explain what happened hoping that she will be comforted that there is hope. Participants in the study by Kukulskienė



and Zamaitiene (2022:11) stated the doctors' humanness, accessibility and expressed concern help patients to accept feelings of lost. He, Wang, Xu, Chen, Liu, Kang and Zhao (2019:1066) suggest that extra attention and psychological support should be given to patients with pregnancy loss not only by medical professionals but also their husband, family, and society. In contrast with the findings, women in a study by Bellhouse et al. (2018:8) expressed some of the silence and some of the comments the others made could be incredibly hurtful.

Some participants explained how it hurts to be unable to tell their family of the causes of miscarriage and accept that information given on the cause of pregnancy loss will help explaining to the family what led to the pregnancy loss. In previous studies by Ormar et al. (2019:7) a robust communication of causes of pregnancy loss would be virtuous to deflect any accusation of feeling of responsibility.

Participants in the current study indicated that when information is given it will assist them to come to terms with what happened unlike when there is no information. According to Alqassim et al. (2022:2) appropriate social support for women who experienced pregnancy loss can provide a much-needed boost to their wellbeing in the short and long term.

It is important that family and friends are not afraid to ask women with recurrent pregnancy loss how they are coping and that women feel comfortable and supported in telling them (Bellhouse et al. 2018:8). Findings in Lordachescu et al. (2021:443) suggest that women who lose recurrent pregnancies manifest the need for emotional support, psychological assistance in ventilation, pain, and loss processing to facilitate acceptance.

3.4.4 Theme and subthemes on barriers to receiving information after recurring pregnancy loss

Barriers refers to 'something that stops you from doing something' (Oxford Dictionary Mini School Dictionary 2018:49). In this study the focus is on barriers of receiving information. According to a study on communication barriers Rani (2016:74) outlined that barriers to communication prevent messages being sent and received successfully. In the current study the focus is on barriers that prevent participants from receiving relevant information after recurring pregnancy loss. The following theme and subthemes were identified and will be discussed (see Table 3.7).



Table 3.7: Theme 4 and associated subthemes

3.4.4. Barriers to receiving information	3.4.4.1 Health care providers' unconducive attitudes
after recurring pregnancy loss	3.4.4.2 Other barriers

3.4.4.1 Health care providers' unconducive attitudes

One aspect of patient satisfaction is their view about staff attitudes. In the current study the participants viewed staff to have unconducive attitudes towards women with recurrent pregnancy loss. The participants emphasized that the attitudes of health care providers are unconducive and is regarded as a barrier to free communication between the health care professionals and pregnant women with recurrent pregnancy loss. Participant stated:

"They did not so I asked why. They say if you do not want uhm to be in this hospital can you please go out, I do not know what happened to me. They just say they must clean me. I do not know what happened to me that's what happened, I don't like true..." (P6).

"No, the nurses I cannot really say so cos, eish you know this nurse, you even afraid sometimes to ask them you understand cos the attitude is not on the same level" (P18).

"But it never happened so but here I am. Government is hearing like, even though they still have that ten ok the male doctors, but they still have that thing like they shut, they not courteous" (P12).

"[Nna] [I] was traumatized by everything like from when I was admitted with the second miscarriage I got there from the clinic and while I was busy with the doctor there was the lady who was in a critical condition that me" (P14).

"Cos I think she fainted, and she was dizzy and everything and the doctor was like get out of here man I took my things and I get outside am also hurt. I also lost the baby even though am not critical as she was. It would be nice if I was told can you please go outside uhh" (P14).

"Because of those nurses that side they are very rude. Not for me, for all people" (P4).

The findings in the study revealed that participants were not satisfied with the attitudes of health care providers as they do not explain interventions and causes of the pregnancy loss to them or ask any consent before any procedure. Health care provider attitude is supported



by Norton and Fuber (2018:6). Participants indicated dissatisfaction about the level of care and felt that staff should treat them as individuals and adapt their communication accordingly. Ibrahim et al. (2019:30) suggest that lack of attention of care providers to emotional aspect of women with early pregnancy loss can affect treatment management. The findings in Jinga, Mongwenyana, Moolla, Malete and Onoya (2019:6) suggest that participants visit the ANC with anticipation that health care providers will verbally abuse them for not attending ANC and in some cases health care providers also acted in that manner.

Some participants explained that the nurse's attitudes are rude and felt that they are even afraid to talk to them. In another study participants complained that nurses and sonographers are insensitive when breaking bad news to them without compassion (Norton & Fuber 2018:6). Jonas, Crutzen, van den Borne, and Reddy, (2017:14) revealed that negative behaviour including attitudes of health care workers are unlikely to encourage women in general to assess and utilizes services. Some participants complained of the rude attitudes of doctors, they shut them out when speaking to them. Jensen, Smith and Bilardi (2019:6) suggest that insensitivity and rudeness of health care workers often discourage pregnant women in general to access and utilize services. In contrast with findings of this study De-Roose, Tency, Beeckman, Van- Hecke, Verhaege and Clays (2017:13) suggest that there is a positive attitude among midwives since they consider themselves as an important health care provider having a key role in psychosocial care for couples with pregnancy loss.

3.4.4.2 Other barriers

Women with recurrent pregnancy loss are confronted with enormous challenges when dealing with pregnancy loss. Some participants stated that they received some information but emphasized that the information was not about pregnancy loss. The following responses explain other barriers encountered when receiving information:

"Oh it especially pregnancy loss, causes some believe that talking about miscarriage also it's something sensitive [nna] [1] believe that if we go for our monthly check up maybe they should try and talk to us about it like as they always warn us about other things maybe before they can start with their morning routines of their [bare keng] [what to call] whatever. I believe that before we go to be and checked by the doctors and so they should tell us and teach us more about this they shouldn't have that mentality that talking about miscarriage is something sensitive" (P10).



"Mm actually that one is very difficult for me to answer because I don't think the midwives have that extra time to explain to us because they are always busy. But isn't that I need extra time to be explained how to look after my pregnancy to prevent further losses, or else what must I do when I have warning signs miscarriages something like that. But I don't think they have that time cos they are always busy" (P17).

"Like with ehh important facts maybe they'll be not enough time like for example maybe the sister can just stand there and talk about you about something using short time" (P3).

The findings revealed because pregnancy loss is sensitive, health care workers could not talk about it. In a study by Kresnye et al. (2020:93) participants acknowledged the difficulty in talking about the pregnancy loss and perceived that it was caused by the stigma of pregnancy loss. Participants went even further by suggesting that midwives should allocate time to provide information on what to do after pregnancy loss and how to prevent future losses. In a study by Baird et al. (2018:117) participants expressed the need that midwives allocate time in their busy schedules for patient's education and sharing information on pregnancy loss to ensure that health education becomes one of the important activities of the day. In a study undertaken by Jensen, Smith and Bilardi (2019:4) participants suggested that external barriers such as time pressure, language barriers and availability of resources are barriers to care of women with pregnancy loss. Most participants in this current study preferred to talk about pregnancy loss during pregnancy, before the actual loss so that they can be ready once the pregnancy loss happens. The finding is supported in previous studies that participants responded that they were experiencing silence during pregnancy loss and believed that talking about pregnancy loss helps (Ibrahim et al. 2019:310).

3.4.5 Theme and subthemes on perceptions of intervention to prevent recurrent pregnancy loss

Participants shared their perceptions on interventions to prevent pregnancy loss. Theme 5 and subthemes, early antenatal bookings, early detection of potential problems and virtual support as depicted in Table 3.8 will be discussed:



Table 3.8: Theme 5 and associated subthemes

3.4.5. Perceptions of interventions to	3.4.5.1 Early antenatal bookings			
prevent pregnancy loss	3.4.5.2 Early detection of potential problems			
	3.4.5.3 Virtual support/information			

3.4.5,1 Early antenatal bookings

Antenatal care (ANC) can be defined as 'the care provided by skilled health professionals to pregnant women and adolescent girls in order to ensure the best condition of both the mother and the baby during pregnancy' (WHO 2016:1). Antenatal care (ANC) is one of the pillars of safe motherhood initiatives for promoting and improving maternal and child health through interventions such as health promotion, treatment of existing disease, early detection and management of pregnancy related complications (Konje, Mgoma, Hatfield, Kuhn, Sauve & Dewey 2018:10). According to Guidelines for Maternity Care in South Africa (2016:30) women should visit her health care provider soon as she suspects pregnancy, even as early as missing her first menstrual period. According to Geta and Yallew (2017:1) pregnant women should go for their first antenatal check-up during their first trimester to identify and manage any medical complication as well as screening for any risk factors that may affect pregnancy outcomes. One participant indicated that:

"I believe that early booking is helpful cos even myself through those miscarriages I didn't book myself earlier from the first time I knew that I was pregnant. So, I believe that if you book earlier uhm when you go regularly for your check-up, they will be able to spot something that can prevented before anything can happen" (P10).

"That one is good. Booking early at the clinic can also prevent some process of miscarriage for example" (P20)

"If you book early the doctors will be able to evaluate check everything" (P20).

"I think early is better cos they'll do the check-ups, and they will tell you what they have this and this and this cos my previous miscarriage I didn't book in time so now I make sure that when I'm two months pregnant I book" (P15).



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"Yaa, I think so. I think it's very important for us to book early even though we get lazy. You understand we give you problem you know we come here late around five months pregnant ohh. You understand and which is wrong cause uhm you always teach us uhh whenever you find out that you are pregnant you must go to the clinic. You understand. So, I think we even [le rena] [we] are failing ourselves you understand, by not following the rules. You understand because you always make sure that you tell us that we must come to the clinic immediately after you find out that you are pregnant. You understand it is very important you must come to the clinic after you find out" (P18).

Participants in the current study suggests that early ANC is helpful to allow health care providers identify pregnancy complications earlier in pregnancy and agree that early booking has a positive impact on pregnancy outcomes. Findings by Mendy, Njie and Sawo (2018:6) revealed that when women book early for care, they have an opportunity to receive all care they need to prevent complications and increase the wellbeing of the mother and unborn baby. The findings in the study are consistent with other studies where researchers suggest that initiating ANC in the first trimester provides opportunity for timely optimum care and treatment of existing conditions (Konje et al. 2018:10). According to Paudel, Jha and Mehata (2017:2) early booking helps health care providers to provide timely information and services according to gestational age and conditions.

Some participants acknowledged booking early for ANC is beneficial. Despite knowing, they continued booking late in previous pregnancies. However due to negative outcomes of previous pregnancies and pregnancy loss they reported that they booked early with the current pregnancy to prevent complications. Warri and George (2020:9) suggest that participants were aware of the importance of early ANC but lacked insight into its comprehensive purpose. In a study by Konje et al. (2018:7) participants appeared to have knowledge of benefits of initiating ANC early, however, perceived poor quality of ANC services in the community discouraged timely initiation of care due to shortage of supplies and drugs. Evidence have shown that even low risk pregnancies can develop complications, which engaged the WHO to move away from the previous ANC model of four goal orientated high risk ANC visits to an increased ANC model of eight contact visits to reduce perinatal mortality and improve experience of care (Warri & George, 2020:2). In contrast with the findings from this study, other studies reported that some participants perceived that registering early in pregnancy in



not necessary as they were not sick. This could lead to a devastating situation because women might feel that they are not ill and will not seek care whilst developing complications without knowing (Konje et al. 2018:7).

3.4.5.2 Early detection of potential problems

Early detection of potential problems in ANC is perceived as an intervention to prevent recurrent pregnancy loss. According to Geta and Yallew (2017:1), ANC helps to ensure the wellbeing of the mother and foetus through early detection of risks pre-pregnancy, prevention of pregnancy and labour complications, and ensure the safe delivery of mother and child. Early detection of complications in pregnancy cannot be separated from early ANC. The participants responded as follows on early detection of potential problems:

"Whatever want to happen maybe the doctor will see it in time and they will help me" (P15).

"I think early booking can help you because they'll be with you every step of the way like until you give birth, then you'll, if there's any problem or any kind of situation happening with the pregnancy, then they'll find out like a little earlier rather than going to the clinic on and on and only to find out that there's something wrong with the baby" (P13).

"At least they could know early of what they are dealing with and this time they could even took some blood samples. They ran them just to check. They said there are two uhm factors that can cause miscarriage, so they wanted to trace them on the blood just to check if am not, I do not have any of those" (P14).

"They can actually detect so many conditions we are not quite aware about ourselves, our body" (P12).

The participant responses reflect that they believe early detection will assist in identifying of the problem rather than presenting with complications at the clinic late in their pregnancy. Participants also indicated that early detection would assist in conditions they are not aware that they have. Jinga et al. (2019:1) indicated that ANC plays a vital role in early detection and treatment of HIV infection in pregnant women. Antenatal care (ANC) attempts to ensure, by antenatal preparation, the best possible pregnancy outcome for women and their babies (Guidelines for Maternity Care in South Africa 2016:29). In Mendy, Nije and Sawo (2018:5)



participants indicated that women were sent to the laboratory for blood tests and were given medication as prophylaxis against malaria and anaemia.

Participants reported that early detection will enable health care providers to know what they are dealing with. A study by Fadilah and Deby (2018:252) suggested that by detecting dangers of pregnancy immediately, health workers will prevent and treat complications in pregnancy easier. A study on Gambian women acknowledged that women require help from nurses to prevent complications in pregnancy and described how nurses used their knowledge to determine their needs and complications early (Mendy, Nije & Sawa 2018:4).

3.4.5.3 Virtual Support/Information

Virtual support involves the use of social media such as Skype and other social media platforms. Virtual support is an important measure of information sharing as it allows women with recurrent pregnancy loss the opportunity to get in touch with other women who also experienced recurrent pregnancy loss. In this manner they can share information with each other. Troiano and Gozolino (2021:5) suggested that social network can play a crucial role to help and encourage individuals after pregnancy loss by providing a positive support system. Participants responded as follows:

"Yaa I think basically like pregnant women are helped now out there. Even I was sitting outside there last they said to me this other lady the pregnant lady said that to me, Ohh do you know about this app there's an app that uhh it gives you information about pregnancy if you just tap your name, then you tap you date your period stopped. It's just that app is just amazing. It just can tell you everything about the baby even though it cannot specifically say the gender of the child, but it goes with you like it can say ok I can go through my phone and check if am 25 weeks what's happening" (P18).

"Yaa like this one we have, with uh on WhatsApp ya Mom Connect they give information about pregnancy" (P14).

"Eh I think [e ka re thusa] [it can help] but Mom Connect it doesn't have much information. I think it doesn't have much information because it basically updates you on the baby" (P5).

"Yaa it's a WhatsApp, yes because some WhatsApp is a group WhatsApp, and they will allow you to use questions if it's not, but I will ask more about it. I'll just ask more about it whether you can ask questions or not on it, but I think you can you know" (P2).



Participants responded that the use of technology enable women with recurrent pregnancy loss to obtain and share information. The participants seem to have a positive view that social media can be used as another method of sharing information to and between women with recurrent pregnancy loss. Participants agree that social media is important to keep them updated with information about their pregnancy by interacting with women who experienced pregnancy loss which play an important role in social support. The study of Troiano and Gozolino (2021:5) concluded that women decided to show their miscarriage on social media considering this action as an attempt to both seek support and solidarity with other women. The positive attitude of participants on virtual support is consistent with the findings in previous studies that posts offering emotional support and humour are likely to be shared, liked and be commented on (Oviatt & Reich 2019:7). This clearly shows how participants appreciate support during pregnancy and pregnancy loss.

Mom Connect emerged as a programme acknowledged by most participants in the study. The Mom Connect programme is a self-helpdesk aimed to promote safe motherhood and improve pregnancy outcomes of women in South Africa (Xiong, Kamunyori & Sebidi 2018:1). According to Xiong, Kamunyori and Sebidi's (2018:1) study on mobile messaging programmes, health outcomes are improved in areas of maternal and child, Human Immunodeficiency Virus (HIV) testing and antiretroviral therapy. Participants suggested that if a programme such as Mom Connect can be developed specifically for women with recurrent pregnancy loss it could help those with pregnancy loss in the future. Chan and Chen (2019:20) in support of the social media and health programmes, suggested that the social media applications have a potential to be widely used to improve maternal wellbeing during the prenatal period and pregnancy. The existing social media programmes proved to be outcome based to promote the wellbeing of the mother and baby. However, there are limited studies that focus on social media and recurrent pregnancy loss.

3.4.6 Theme and subthemes on perceptions of information to prevent pregnancy loss Health care professionals and midwives always aim at early prevention of complications pregnancy loss. Theme 6 and subthemes are depicted in Table 3.9 and the perceptions are reflected in the quotes below.



Table 3.9: Theme 6 and associated subthemes

3.4.6 Perceptions of information to	3.4.6.1 Written/printed information			
prevent pregnancy loss	3.4.6.2 Health education/information from midwives			

3.4.6.1. Written/Printed information

Written or printed information has been helpful to pregnant women in ANC helping them to learn about pregnancy related information to improve and reduce complications associated with pregnancy. According to Yani, abdulah, Gbaje and Gammaa (2020:86) the thrust on types of information in numerous literature documents followed formal documentation patterns such as grey, peer review chapters in books, monographs, website blogs and pamphlets. For the purpose of this study participants were asked about their perceptions on provision or dissemination on pamphlets at the antenatal clinic to prevent recurrent pregnancy loss. Participants' perceptions on written/printed information were as follows:

"At least would know more cause for me it will be more like you got counselling. At least you can read about miscarriages and stuff cause normally there's leaflets about pregnancies and everything but there nothing about miscarriages (P14).

"I was never given anything just only antibiotics, and Yaa I was never given any information" (P9).

"They need the pamphlets because others are not used to social media" (P6).

Participants response suggested that if they were provided information in pamphlets at the antenatal clinic it could be a useful source of information. They also agree that leaflets can be helpful in sharing information to pregnant women at the antenatal clinic. Austin et al. (2020:185) also suggest that information leaflets can be a useful tool in providing patients with information they can take away and process.

The responses of the participants indicated that the health professionals in the current study did not provide the relevant information in pamphlets at the clinic and some participants did not receive any written information at all. The findings suggest that participants acknowledge the importance of information in the form of leaflets at the clinic, however, the information should be direct to the current problem. In a study by Engel and Rempel (2016:54), health



care professionals reported that they mostly provide information in printed form about possible complications, physical symptoms of early pregnancy loss, and its causes. Previous studies suggest that information leaflets improve patient knowledge when it is well written (Sustersic, Gauchet, Foote & Bosson 2016:540).

Some participants reported that they received the leaflets, but they do not read them due to lack of motivation and suggested that midwives should read the pamphlets first at the antenatal clinic, convey the information, and participants will then read the information at home. Medical terms used in pamphlets prompted researchers to suggest that participants seek help for explanation of the pamphlet in plain language to ensure understanding of medical terms used (Bolislis, Mortazavi, Ricgoni, Schaelta & Kuhler 2020:835). In contrast with the findings in the current study, participants in a study by Yani, Abdulah, Gbaje and Gammaa (2020:94) perceived information provided and disseminated at ANC settings as alien and contradicting to their culture. However, the use of information remains the decision of women, the impact of non-use of patient information was not established in the study.

3.4.6.2 Health education/information from midwives

According to Bergh (2021:3) health education refers to any combination of learning experience designed to help individuals and communities to improve their health by increasing their knowledge or influencing their attitudes. Participants in the study responded on the health education given by midwives at the ANC during pregnancy loss and after as follows:

"Yaa, I haven't received information about pregnancy loss since I started uhh going for my routine check-up. The only the only thing that they will tell you about its dangers that you should be aware of or the signs of labour that's all" (P10).

"I think they should give it to us before we give birth, actually it should be given to us when we come to the clinic like it must be an everyday matter. So that we can understand" (P8).

"Hoh, I think they must send people to the clinic, the first-time mummies to get information about the pregnancy so before [kore] [so] before you can even enter the second trimester, you must at least have more information about pregnancy. What to expect and what not to expect" (P11).



Participants responded that they did not receive information on pregnancy loss by midwives, however acknowledged the importance of health education at the clinics by nurses and midwives. They explained further that health education and information can be given in the mornings before the clinic activities start. Information can also be given on one-on-one contact with midwives or nurses can form classes at the clinics where they can share that information on pregnancy loss to all the women. According to Lima, de Hollando, de Oliveira, de Oliveira, Santos, and Carvalho (2019:970), health education in group sessions contributed significantly to the establishment of confidence and knowledge building in participants. The responses from participants and literature indicate that health education is important to women in pregnancy and during pregnancy loss. Some women preferred that it is important to receive information immediately after conception. Omar et al. (2019:7) stated that attention should be paid to information provision to ensure that women are given appropriate information about causes of miscarriage (pregnancy loss) to reduce the harm to women who experience pregnancy loss. The findings revealed that ANC provided an avenue for information giving establishing a positive provider client relationship that brought about great understanding of what women were experiencing (Mendy, Njie & Sawo 2018:6).

3.4.7 Theme and subthemes on perception of sources of information after pregnancy loss

Perception of sources of information emerged as Theme 7. According to Coomarasamy et al. (2021:1675) women who have had repeated miscarriages often have uncertainties about the cause, the likelihood of recurrence, the investigations they need and the treatments that might help. Participants perceptions on pregnancy loss were discussed based on the subthemes stated in Table 3.10 below.

Table 3.10: Theme 7 and associate subthemes

3.4.7 Perceptions of sources of information after	3.4.7.1 Medical practitioner
recurring pregnancy loss	3.4.7.2 Midwives
	3.4.7.3 Virtual media
	3.4.7.4 Counselling
	3.4.7.5 Other sources



3.4.7.1 Medical practitioner

The researcher explored the sources of information women encountered after recurrent pregnancy loss. The first source of information that emerged is the medical practitioners. The medical practitioners are always bearers of news about pregnancy loss. During the time of the loss, it can be difficult for patients to understand information by medical practitioner (Kukulskienė & Zemaitiene 2022:16). The following are the remarks of the participants:

"No only the doctors were the one they admitted me there, it was like midnight it was nearly half past nine to 10. So, the nurses were I don't know, sleeping or what only the doctors were able to speak to me alone. They were able to counsel me and tell me it's not the end of the world you can have another baby, your age still qualifying for another baby neh" (P15).

"So, I was not really satisfied I expected explanation, uh maybe a thorough or maybe uhh in private or I don't know? Or that maybe you can explain clearly. Wow, I think if it's happening like this, then this it's what happened causes some of the things we don't know. You are the nurses you understand neh, if I have abdominal pain you know whether why am I having abdominal pain, maybe the kid is not ahh ngwana ga anna pila [the baby is not well positioned] or what" (P18).

Another participant describes her dissatisfaction with a particular doctor by saying: "Even when I asked him it was; he was old school, his word or the high road" (P12).

The findings in the current study indicate those medical practitioners were able to inform participants about the pregnancy loss. Participants expressed dissatisfaction with information provided by a medical practitioner feeling that it was not enough to prevent future pregnancy loss. In a study by Norton and Fuber (2018:4), general practitioners were criticized for not giving information about their service to prepare for pregnancy loss should it occur. Kukulskienė and Zemaitiene (2022:10) indicated that participants in their dissatisfaction with delay and long waiting time explained that it is difficult to process information due to constant haste of doctors. In contrast with the findings in this study, participants in a study by Kresnye et al. (2020:94) suggested that while information might be provided during trigger events or at the start of a medical decision stage, it may take time to come to terms with the loss.



3.4.7.2 Midwives

According to De-Roose et al. (2018:3) the midwife is assumed to possess sufficient knowledge and skills to provide adequate care for women experiencing miscarriage. Nash, Barry and Bradshaw (2018:796) outlined those midwives provide care for women with pregnancy loss as well as support for women throughout childbirth. The role of midwives in health education and information sharing to patients attending ANC cannot be underestimated. Midwives and other health professionals should ensure that pregnant women with recurring pregnancy loss are not treated differently from women who never experienced pregnancy loss. Participants expressed that:

"No, I can say am not satisfied because I can't remember using information from midwives, no ways" (P17).

"So, if you show love to your patient, we smile at us you make us like understand whatever everything that you are telling us about. Yaa just patient with your patients, just showing love and care to your patient, that's all" (P20).

"Yes, they tried because all the time ba tlhalosa ke a botsisa ga ke bona something se ke sa se tlhaloganyeng ka nna" [they tried all the time to explain, they ask me when I see something that I don't understand about myself I must ask] (P 16).

The participants expressed their dissatisfaction with midwives and stated that they were not given information by midwives. One participant gave her view on how nurses should respond to them when they come to the clinic so that they can feel welcomed and maybe interact with them to get more information. Findings in a study by Norton and Fuber (2018:6) reflected that there was an overwhelming sense that women needed the staff to treat them as individuals however, some women felt that nurses overly expressed their sympathy towards them.

Some participants raised no concerns on how midwives treated them. They were satisfied with the information provided by midwives. The finding of Nash, Barry, and Bradshaw (2018:796) suggested that midwives should receive education in areas of pregnancy loss, hot to debrief and counsel because of emotional effects of pregnancy loss on midwives and other health care professionals. In another study by Helps, O'Donoghue, O'Byrne, Greene and Leitao (2020:4) findings revealed that trained staff such as the clinical midwife specialists can provide vital support in practical counselling to the bereaved families of all types of pregnancy loss.



3.4.7.3 Virtual media

Virtual media also referred to as 'virtual social space' is where people come together to receive and give information or support to learn or find company (Callen 2019:6). The participants showed interest in the use of virtual media platforms to disseminate information to women with recurrent pregnancy loss. Some participants indicated that they found the information on the internet very informative, and they even joined a social media support group for support information and emotional support during their pregnancies. Participant comments included:

"If you need to go and search information rather than maybe we need to go to clinic to go to clinic and find such information and technology, using cell phone you can get more information about what specifically you are looking for. Ok when you google, you'll ok specify about what you are looking for" (P3).

"Of course, social media it's a huge impact in our lives and positively so I think the use of social media can help a lot because we had to share stories and identify our problems to see that we are not the only ones who are going through what we are going through at that moment, so the use of social media is very helpful it's very helpful" (P9).

"I would say it can't it only work for those who have them. Cause some of the ladies they stay in rural areas they do not have TV they do not have phones they use the small phones. They do not have WhatsApp and stuff. If they cannot get the information anywhere else" (P4).

"Media can also help cause nowadays us youth we like this media so obviously when you are on this media you going get to learn about those things" (P20).

The quotations above showed that participants support the use of virtual media in recurrent pregnancy loss. Participants explained how they share their stories with other women who are going through the same reality. YouTube users in a study by Visa and Briones-Vosmediano (2020:210) suggested that personal testimonial videos enable others to watch people as they go through situations like their own, to look for their reassurance as a sense of normality and support, while those who post and share their videos are validated in their experience. Women with pregnancy loss uses online discussion forums to seek support and information (Alqassim et al. 2022:3) despite information received from nurses (Norton & Fuber 2018:5). According to Kresnye et al. (2020:94) researchers highlighted the use of social network integration



systems that would connect individuals to others who share similar experiences to seek emotional social support at a level at which they are comfortable.

The current study did not establish why women resorted to virtual media as a source of information. In previous studies women commonly reported inadequate support in real life from families, health professionals and the community, it is possible that there - online platforms available where support needs can be met (Callen 2019:42). According to Pang et al. (2018:121) findings indicated that women expressed a desire to keep updated with research and breakthrough news in miscarriage.

3.4.7.4 Counselling

Counselling is a process in which clients learn how to make decisions and formulate new ways of behaving, feeling, and thinking (Kabir 2017:22). Pregnancy loss is clearly a devastating experience to women with pregnancy loss, therefore appropriate information through counselling at ANC should be provided to help them overcome the psychological pressures that accompany the loss. The following were responses of participants regarding counselling:

"Yes, I think I need one, I think professional counselling it will be different from the one I got outside hospital. I do not think they are going to be same. There will be some aspects that I did not get from outside the hospital" (P3).

"It's a I believe that it was helpful but on the other side I believe that uhm it needed to be more interactive cause the social worker just asked me those basic questions that are you fine are you ok and how's that she didn't go that deep with it to check if you will be fine in the nearer future or to more or so, I think she was more focused on how you are today" (P10).

"Yes, last year when I lost the baby at 23 weeks so one of the social workers at the hospital did talk to me but that time, I had stress. Heard more during that time she promised me to call her when I was ready, but I didn't take it seriously, I didn't call her back" (P17).

According to the responses participants had mixed feeling about counselling as most of the participants were not offered counselling at the time the pregnancy loss occurred. Some of the participants revealed that they did not receive any form of counselling from health professionals and in particular the midwives.



Those who received counselling explained how they were passive, not ready for counselling at the time because of grief, pain, and emotions. They further agree that counselling is important but are questioning the way it is given including the timing of the sessions. In Kresnye et al. (2020:94) participants responded that they wanted to be guided and supported through miscarriage experiences by trusted and reliable health care providers who could provide accurate information. Kabir (2017:23) also indicates that the importance of counselling is facilitating behavioural change, change of one's coping skills, promoting decision making, improve relationships and facilitating one's potential. Meaney, Corcoran, Spillane, and O'Donoghue (2017:7) suggested that provision of private clinical information when counselling individuals who are experiencing a miscarriage is important.

3.4.7.5 Other sources

The participants explained that they also utilized other sources for information and prevention of recurrent pregnancy loss. They used the sources as they did not receive information from health care professionals. Comments included:

"So, with the fourth pregnancy I just went to someone, a traditional healer, she tells me the same thing that that they told at the church" (P3).

"Yaa after that I was, when I was at home, I would maybe speak to those who walk like around I don't know the nurses or what who goes house to house' (P15).

The quotations above reflected those participants who explored other ways to access information such as the church and traditional healers. It reflects the importance of cultural norms and beliefs of women when using their wider social networks such as the traditional healers and the church. In a study about women in Qatar who experienced pregnancy loss, women reported that they were comforted by their strong believe in God that pregnancy loss happens for a reason which led open discussions amongst women (Omar et al. 2019:7). Similar findings were reported in Yani, Abdulla, Gbaje and Gammaa (2022:92). Participants suggested other sources of information apart to the ones offered by health care providers as information from family members and friends which influenced their decisions about their pregnancy. Participants also reported speaking to community health workers as a source of information while at home. The findings were supported by a study on community health workers in Rwanda. These community health workers form an integral part of the health care system, and their services includes the use of ANC information, family planning as well as



behaviour change for better maternal outcome (Tuyisenge et al., 2020:2). In another study on the role of community health care workers researchers and their involvement of pregnancy related aspects however revealed that they will be better positioned by revising their scope of practice to respond to local health needs and priorities (Olaniran, Madj, Bar Zev & Van den Broek 2019:10). The involvement of community health care workers in pregnancy loss were not stated in any previous studies.

3.4.8 Theme and subthemes on recommendations for receiving information after recurring pregnancy loss

Recommendations for receiving information emerged as Theme 8. Receiving information after recurring pregnancy loss can be crucial to women who experience pregnancy loss.

Table 3.11: Themes 8 and associated subthemes

	3.4.8	Recommendations	for	receiving	3.4.8.1	Health	education	regarding
information after recurring pregnancy loss				pregnancy loss				
				3.4.8.2 Preferred time to receive information				
					3.4.8.3 Peer group information/support			

3.4.8.1 Health education regarding pregnancy loss

According to Lima et al. (2019:969) health education is an instrument that allows pregnant women to expose their possible doubts and questions aiming to reduce uncertainties through orientation in health, making possible the construction of autonomy of pregnant women, contributing to promoting the empowerment of guidelines. Health education seeks to motivate an individual through behavioural change by directly influencing their values, beliefs and attitude system where it is deemed that the individual is particularly at risk or has been affected by illness disease or disability (Whitehead 2018:39). Health education is an important aspect of patient care because it impacts on improving maternal outcomes and promotes participants' compliance to advice by midwives and doctors. Some of the responses of the participants are stated below:

"Yaa they need it. Yes, they really do. It must be compulsory, it must be there it must always be there, there must be people specifically doing that job. You understand" (P18).



"Yes for women who have lost their babies even if you didn't lose the baby, if want to know you can also be involved in the information sharing. They can tell you what really happens when you lose the baby" (P13).

The findings reveal that most women recommend health education is needed by women with recurrent pregnancy loss. Participants also recommend that health education should be always accessible, meet expectations and include causes of pregnancy loss. According to Baird et al. (2018:116) women who experience early pregnancy loss felt that primary care providers can play an integral part in addressing women with information on pregnancy loss through health education. In a study undertaken by Mendy et al. (2018:4) findings suggest that nurses have knowledge and should teach women on how good and important it is to join ANC. Participants recommend that health education should be given to women who have no history of pregnancy loss so that if pregnancy loss happens to them, they know what to do. Lima et al. (2019:969) suggest that health education activities should rely on health professionals to be facilitators of groups who build trustworthy knowledge these women have about prevention, promotion, and treatment. In enhancing health care team outcomes findings suggests that nurses should educate women and their family regarding possible aetiologies of pregnancy loss and required investigations (Pillaresetty & Mahdy 2021:8). Previous studies by Jibril, Saleh, Badaki, Anyebe, Umar and Kamal (2018:158) revealed that there was satisfaction over the health education package delivered during ANC visits and participants acknowledged the importance maternal health services in prevention of pregnancy associated outcomes.

3.4.8.2 Preferred time to receive information

Participants responded as follows when asked when the information on pregnancy loss should be given to them:

"I think immediately after losing the child, maybe they should give her counselling and then every time you come for review, they give you treatment and the counselling they take you" (P13).

"Before you are discharged maybe during the process when the doctor realize that the baby might not be alive or it's still early then he explains to you that this is what going happen and then the reason this is why it's happening is because of this and this. And maybe much more information they can give you when they transferred you to the ward or something" (P10).



The above responses suggest that participant's information about recurrent pregnancy loss should be shared immediately after the loss. Some participants suggest that information should be shared when the doctor diagnose the pregnancy loss or identify that the pregnancy loss might happen. Previous studies suggested that health care professionals should not provide secondary information related to future pregnancies immediately after the loss unless the patient asks about this and need advice (Kukulskiene & Zamaitiene 2022:10). The findings in Kresnye et al. (2020:94) suggests that general trusted information about pregnancy loss should be shared with women towards the beginning of pregnancy which they can explore at their own time. The Eshre Guideline Recurrent pregnancy loss update (2020:19) states that recurrent pregnancy loss recommends that the first visit is the opportunity to provide information about recurrent pregnancy loss incidence, causes and investigations and to link it to patient history. There are few studies on the preferred time to inform women about their pregnancy loss, however studies have been done on giving the women with pregnancy loss time to process the loss. Brann, Bute, and Scott (2019:6) suggest that women need time to process the initial pregnancy loss news and need options to manage miscarriage. Kukulskiene and Zamaitiene (2022:10) also suggested that information provided by medical staff will be perceived more efficient after some time when initial spontaneous emotions subside.

3.4.8.3 Peer group information/support

Peer group information emerged as the last subtheme where women gave their responses regarding information needs. According to Spadafora, Al-jbouri and Schiralli (2019:1) peer group refers to a group of people approximately of the same age who have similar interest, background, or social status. Participants' comments on peer group support were as follows:

"And sometimes like when I come back from the hospital, I feel like certain this that I did I speak to other women and then this is something that is international" (P12).

"Hoh you can't wait for something to happen something like that to happen like we are having a person who has the same experiences or who has experienced miscarriage or speaking about it just confident about it to talk about it" (P9).

"Yes, programmes like Alcoholics Anonymous (AA) where people who have a drinking problem meet and share their problems. They can arrange a programme for the baby losses" (P4).



The above responses show that women in the study acknowledge peer group information that talking to other women who had the same experience and share problems with them has been beneficial. In a study undertaken by Alqassim et al. (2022:11) participants revealed that they wanted timely and easy access to support groups and other people with similar experiences which provided a sense of belonging, and unfortunately such groups were difficult to find. According to Kresnye et al. (2020:86) participants also benefited from contact with others who had experienced pregnancy loss and educating peer support may assist in reduced stigma for participants. Participants in a study by Bailey et al. (2019:7) referred to the value of receiving peer support as one of the useful practical approaches they could adopt during pregnancy loss. Participants in a study by Kaswa, Rupesinghe and Longo-Mbeza (2018:4) acknowledged mother or peer as a source of information and none mentioned health care workers.

Participants in the current study also suggested that programs such as AA could assist in peer groups. Alcoholic Anonymous (AA) is a fellowship of men and women who share their experiences, strength, and hope with each other to solve their common problem and help others to recover from alcoholism (Okello & Ogolla 2016:21). In the context of this study participants suggested for a similar program to assist them in coping with pregnancy loss. In their case they need this kind of a group to share their experiences on pregnancy loss, support each other and solve their problems to recover from the devastating ordeal of pregnancy loss. According to Campillo, Meaney, Mc Namara (2017:2) previous studies indicate the importance of providing support for women in subsequent pregnancy following miscarriage. Findings in Pillaresetty and Mahdy (2021:8) suggest that nurses should refer patients with recurrent pregnancy loss to patients support groups that will help them cope with negative outcomes of recurrent pregnancy loss.

3.5 CONCLUSION

This chapter discussed the demographic information of participants, sample overview, themes and subthemes, and literature that were used to support the findings of the study. Participants responded and disclosed that women need information during recurrent pregnancy loss to become knowledgeable about their condition. It was evident that their experiences varied but brought forward emotions. Most participants were dissatisfied about the ANC information they received hence considered other sources of information available such as searching for information online. The attitudes of health care providers are unbearable to most participants opting for more attention from healthcare providers especially during pregnancy loss. The



benefit of attending ANC is still not clear to most participants. The next chapter will discuss the recommendations based on the findings and the limitations of the study.



CHAPTER 4:

SUMMARY OF FINDINGS, IMPLICATIONS, CONCLUSION, AND RECOMMENDATIONS

4.1 INTRODUCTION

This chapter presents an overview of the findings, limitations and conclusion of the research study. The study was done to probe on information women receive after recurring pregnancy loss. The chapter will also provide recommendations that can be pursued by midwives and other health professionals working with pregnancy and pregnancy loss.

The study was conducted in an antenatal setting of an Academic Hospital in Tshwane, Gauteng province. The participants were 20 pregnant women with a history of two pregnancy losses or more and no live babies. The participants were between the ages of 18 to 40 years. The research study was a qualitative study where selection of participants was purposive. Semi structured interviews were used as a method for data collection. A pilot study was done on two participants in another hospital before the commencement of the main study. The researcher used an audio tape to record all interviews and transcribe after each interview session. All participants consented for their participation in the research study.

4.2 OVERVIEW OF FINDINGS

4.2.1 Overview

The study aimed to explore and describe the information women receive in the antenatal setting of an Academic Hospital in Tshwane, Gauteng province. A thematic analysis was employed to extract the themes as a method to achieve the objective of the study. The following themes are summarized as they were discussed in Chapter 3:

- Experiences of recurring pregnancy loss
- Information received after pregnancy loss
- Benefits of receiving information after recurring pregnancy loss
- Barriers to receiving information after recurring pregnancy loss
- Perception of intervention to prevent pregnancy loss
- Perception of information to prevent pregnancy loss
- Perception of sources of information after pregnancy loss



Recommendations for receiving information after recurring pregnancy loss

4.3 SUMMARY OF KEY FINDINGS

The findings of the study were summarized according to the themes that emerged from data collected during the interviews.

4.3.1 Experiences of recurring pregnancy loss

The study revealed how women with recurrent pregnancy loss experienced sad emotions and have expressed their depressed emotions after pregnancy loss. All participants agreed that the experience was emotionally draining, hence they agreed that it was most devastating moments they encountered.

They further expressed that the incidents were sudden and without notice. Participants shared moments during the encounter and explained that they did not receive any warning signs. The pregnancy loss was never anticipated, and they believe that midwives could have prepared them for pregnancy loss. Some shared how they were reassured that everything is well when they left the setting, then upon arrival or later, they lost the pregnancy anyway. Data suggests that all women had positive expectations of the pregnancy. The participants further expressed their expectations towards pregnancy, the moment they conceived; they were looking forward to holding their baby.

Findings further disclosed how the symptoms experienced were also similar in that they could relate to their previous losses. The participants agreed however due to the lack of information, those experiences seemed new at every occurrence. Of all participants expressed that they either mentioned 'bleeding' and feeling of 'something coming out' or having 'stomach cramps'.

Participants also felt that midwives and other health professional were uninformed as to where they were supposed to receive care on their pregnancy loss. Participants explained how they were moving from the emergency unit to the maternity and gynaecological departments in searching for interventions. They felt a lack of respect from health care providers in providing support during the pregnancy loss and poor provision of care immediately after the loss. The participants also shared how they waited for provision of care from the health care professional which also showed a similarity of events in that women with recurring pregnancy loss are not given the attention they expect from the health setting.



The findings from the study revealed that pregnancy loss affects women emotionally and physically. In their report women could not exclude the amount of pain they felt during the pregnancy loss which speaks to midwives in one of their key roles in the profession which is alleviation of pain in all patients. Pregnancy loss is a devastating experience that affected women emotionally, thus the women shared their emotions by saying it was devastating, stressful, uneasy, and fearful. They were concerned even in their current pregnancy that as the previous incidents were sudden, they were terrified that it could happen again. Their expectations for a positive pregnancy outcome are crumpled by the losses.

The study revealed how women received support from the family and the community which according to the findings had positive as well as negative effects. The spiritual support from churches and the believe that God is always on their side played an important role in helping women with pregnancy loss overcome their tribulations. Participants shared how their family members and spouses offered support and encouragement.

The stigma that accompanies pregnancy loss due to cultural and religious factors revealed how the women were put to blame by close families and the society. As a result of such treatment women reported how they were held accountable for the losses. The findings also suggest that some women with recurrent pregnancy loss isolated themselves from families and society to cope with the losses thinking that avoiding contact will reduce the pain and sadness.

Furthermore, the findings of study revealed that most women developed their own coping strategies and used suppression and their faith in God as their coping mechanism. To those who used suppression chose not to indulge their thoughts on their previous experience to prevent any distraction on their current pregnancy. However other participants used their religion and faith as coping strategy. They believed in God's intervention in their affairs which is sometimes signified as 'God's plan', which is understood as the religious perspective.

The thought of recurrent pregnancy loss as 'God's plan' could not conceal participants from their perceptions of self-blame, guilt, and unfavourable working conditions. Their overall perceptions on causes of pregnancy loss were based on mostly self-preventative factors.



4.3.2 Information women received after pregnancy loss

The findings revealed that participants were not satisfied with the information offered to them by health professionals and midwives. They continued to regard the information as deficient and not specific to their condition, therefore it was not helpful towards preparing them for future pregnancies. Some participants regarded the situation as being hopeless because they were asked to come back when they have lost three pregnancies. Some raised their inexperience in pregnancy loss that they needed more information as from their first loss because of it being totally a new experience to them.

Most participants agreed that physicians were the ones able to provide information even though it was insufficient. From the responses of participants, it became clear that the causes of pregnancy loss were among the leading causes stipulated in the Saving Mothers and Babies Report and most recent studies on causes of pregnancy loss. Among those mentioned were blood loss, high blood pressure, infections, and cervical incompetency. The suggestions by participants showed their level of knowledge on pregnancy loss as being fair and incomplete based on their specific needs.

The data revealed that intervention from health care professionals play a vital role in ensuring quality care and an achievement of positive pregnancy outcome, and also provide closure to some participants after their pregnancy loss. Some participants dealt with the fact that precise interventions will only be available with the next pregnancy due to either late booking or late reaction from practitioners. The importance of information provision to participants become evident in such instances where all participants considered it as a resolution to their problem. Participants dealt with uncertainty that if the relevant interventions were available then, they would not have gone through pregnancy loss.

According to the study findings, several participants indicated they were satisfied to be referred from different levels of care to the Academic Hospital where they expect a change in their reproductive status to have live babies. Most participants attempted to ask doctors and midwives questions while still pregnant to learn more how to prevent pregnancy loss.

4.3.3 Benefits of receiving information after recurring pregnancy loss

When addressing the benefit of receiving information after pregnancy loss, participants suggested that if they were provided with relevant information, they would know what steps to take to prevent pregnancy loss and even which precautions to take after losing the pregnancy.



The study findings clearly indicate that provision of information to participants will benefit future pregnancies. They explained further that knowing the precautions to take will assist in the prepregnancy period where they will know what process to follow before they consider falling pregnant again. All participants agreed on the provision and improvement in rendering specific information based on pregnancy loss.

The participants suggested that it is important to speak to someone after pregnancy loss for emotional support. Participants also disclosed that it is important to communicate with family members about the experience and suggest that information should be provided to enable them to explain what happened. They blamed lack of information on their ability to explain their challenge to the family. All participants agreed that when they communicate to someone in the family and community, it reduces emotional consequences after the loss and helps with the grieving process.

4.3.4 Barriers to receiving information after pregnancy loss

Participants mentioned health care provider's unconducive attitudes as a barrier to information receiving after pregnancy loss. The rude attitudes of nurses and health care providers affect the communication between health care providers and women with pregnancy loss as well as utilization of services in the antenatal setting. Participants stated interventions were carried without informing participants about their condition during pregnancy loss. Participants also displayed their fear to nurses as they feel that their attitudes are not welcoming, and they are unable to ask information regarding their condition.

Participants further explained how other health professional's attitudes left participants traumatized that added to the pain they endeavour during the pregnancy loss. Participants felt that health professionals should display a welcoming attitude to enable communication that will promote information provision to participants.

The unconducive attitudes of health professionals were not the only barrier towards effective information sharing with participants. The participants raised their challenges in dealing with the loss. Women suggested that the information provided to them in the ANC setting was not relevant to pregnancy loss. Participants also elicited that health care providers regard pregnancy loss as sensitive and are reluctant to share information with women with recurrent pregnancy loss. Participants recommended that health care professionals should find time in their busy schedules to share information with women with a history of pregnancy loss. They



believe talking about pregnancy loss will help them recover from pregnancy loss. Participants suggests that midwives and doctors should talk to them in the morning when they arrive at the clinic during health talks to warn them about complications that might arise during pregnancy and pregnancy loss.

4.3.5 Perception of intervention to prevent pregnancy loss

Early antenatal booking emerged as a subtheme in interventions to prevent pregnancy loss. Participant responses showed that they have information on the importance of early ANC booking. They raised reasons to attend ANC early as to ensure health care providers can identify complications early and to enable doctors to do check-ups and share results early in pregnancy as this may reduce recurrent pregnancy loss. Participants further acknowledged that despite their awareness of early booking benefits they chose not to initiate antenatal booking early during previous pregnancies. By acknowledging errors in previous pregnancies participants further added that they sometimes felt lazy to book early which might have caused the complications they experienced with their previous losses. However, the previous experience prompted participants to book early to improve the current pregnancy outcome.

Participants also mentioned early detection of the potential problem may prevent recurrent pregnancy loss as health care providers will be able to detect the problems early in pregnancy and intervene to prevent complications. Participants further explained that health care providers will be able to follow up on patients until the problem is resolved or prevented. They further mentioned that doctors will prepare further screening such as blood tests to exclude previous causes of pregnancy loss and the investigations will assist in preparedness as far as the individual patient is concerned. All participant responses indicate the amount of confidence participants have towards health care providers and believe that if the problem is detected early in pregnancy, then possible complications may be prevented.

Virtual support also emerged as an important method of information provided to women with recurrent pregnancy loss. Participants explained that they are aware of programmes such as Mom Connect and its role to women during pregnancy. However, they felt that Mom Connect could not provide relevant information to women with recurrent pregnancy loss. Participants acknowledge the presence of virtual support and agree to its positive impact to women with recurrent pregnancy loss should it be relevant to their condition of recurrent pregnancy loss,



for example, providing alarming symptoms for pregnancy loss. Hence women with recurrent pregnancies lost hope for programmes addressing recurrent pregnancy loss.

4.3.6 Perceptions of information to prevent pregnancy loss

Participants responded that information should be provided in writing in the antenatal clinic. They explained that written information will serve as additional information apart from that provided at the antenatal settings. The study participants also mentioned that the information provided in the leaflets at the setting were not relevant to pregnancy loss and request written information that covers pregnancy loss that can be utilized by women who have been through pregnancy loss and those that need such information.

Participants also mentioned the use of medical terms in written information which made the material difficult to read and to understand the information provided. Participants indicated that information should be read first by midwives at the antenatal clinics before it is taken home by women to read. Participants also stated that the information should be provided in a way that all women will be able to read and understand in their preferred languages. Some participants revealed they were not given any information in written form. This indicates that information needs in a recurrent pregnancy is of greater demand to all women with pregnancy loss and pregnancy complications.

Health education as a known method of information provided in health care settings also emerged as perceived source of information to prevent recurring pregnancy loss. Participants in the study reported that they were not given any health education regarding pregnancy loss and added that health education is an important and effective method of providing information. Participants stated that information should be provided by midwives at the clinics preferably in the mornings during their early pregnancy days before complications arise. Participants wanted information on what to expect when pregnancy loss happens and indicated that nurses should also provide one on one information to women with pregnancy loss.

4.3.7 Perception of information after pregnancy loss

Participants described their perceptions on medical practitioners after pregnancy loss. Some participants mentioned that they were admitted by doctors who were able to talk to them and provide information after pregnancy loss. However not all participants received information after the pregnancy loss, some declared their dissatisfaction in terms of information provided after pregnancy loss. Participants claimed that some of medical practitioners did not give



information after pregnancy loss, instead they were very opinionated and excluded them in terms of decisions on their care. Participants felt that doctors were enforcing their decisions on their health conditions. Participant responses indicate that women with pregnancy loss acknowledged the information and counselling provided by medical practitioners after pregnancy loss and those with negative experiences from medical practitioners would appreciate a change in the way information was provided during pregnancy loss.

Participants also responded regarding information provided by midwives after pregnancy loss. In their responses participants explained that they were not satisfied as the midwives did not provide them with the information needed. Participants explained the need for information from midwives. Midwives should always be welcoming providing care because they are always present during care and interventions. However not all participants were dissatisfied with the information midwives provided. Some participants described midwives provided detailed information in response to their questions.

The findings of the study revealed that participants have an interest in virtual media as a source of information and support. Participants shared they searched online to get information to add to the information received in the antenatal clinic. Participants also shared that virtual media has a huge impact on women with recurrent pregnancy loss because information can be shared with other women experiencing recurrent pregnancy loss. Participants added that virtual media is a platform for women to learn more about pregnancy loss. Virtual platforms such as WhatsApp, YouTube, and other online platforms have proven to be beneficial as a source of information sharing among women with recurrent pregnancy loss. Even though all participants in the study found virtual media as an essential platform for information provision, some participants felt that virtual media cannot be accessible to all women due to difference in socio economic conditions.

The findings of the study indicated that participants consider counselling important as a source of information for women with pregnancy loss however explained that due to pain experienced after recurrent pregnancy loss participants were unable to listen during counselling sessions provided at the health setting. Some participants mentioned they were not given information after recurrent pregnancy loss. The responses indicate that participants need counselling after pregnancy loss and health care providers trained to counsel women should consider barriers such as pain and the psychological condition of women prior to counselling. Participants



perceived sources such as traditional healers, the church and other women who experienced pregnancy loss as a source for counselling. Community health care workers visiting homes were also regarded as another source of counselling to women with pregnancy loss.

4.3.8 Recommendations for receiving information after pregnancy loss

Participants recommended that health care providers should provide health education to women with recurrent pregnancy loss. Participants emphasized that information on pregnancy loss should be provided by skilled health care professionals trained for counselling. They further recommended that even women with no experience of pregnancy loss should be able to access the information on pregnancy loss in case they need it.

Participants also suggested a preferred time to provide information to participants. Information should be provided immediately after pregnancy loss. Some of the participants preferred to receive information immediately after the diagnosis however preferred not to be overload with information and recommended follow-up care to receive more information on pregnancy loss and plan for future pregnancies.

Women in the study shared their need for peer group support consisting of members with a similar background and information on recurrent pregnancy loss. Participants referred to programmes for recovery and support such as the AA (Alcoholics Anonymous). Women with recurrent pregnancy loss could benefit to such programs.

4.1 RECOMMENDATIONS TO THE STUDY

The following are recommendations based on the above discussion from the findings of the study.

4.4.1 Recommendation for community education

Participants in the study reported lack of information from health care providers on pregnancy loss. The following recommendations are based on the study findings.

- Health care providers in the antenatal clinic settings should provide women with information on recurrent pregnancy loss.
- Health care providers should engage in community awareness programmes on pregnancy loss information to enhance support of pregnancy loss. Information should be provided in writing as well as through health education and in a language understood by women to enhance participant knowledge.



- Participants blamed themselves for being the cause of recurring pregnancy loss due
 to lifestyle and activities such as carrying a heavy load and prolonged standing at work.
 Women with pregnancy loss should be provided with information so that they do not
 come to their own conclusions regarding possible causes and risk factors surrounding
 pregnancy loss, to alleviate the stigma and blame.
- Early detection of complications will allow the healthcare provider the time to identify
 possible complication and prevent pregnancy loss where possible. The results indicate
 that participants understand the need for early detection of complications during
 pregnancy which would only be done through early initiation of antenatal care.
- Managers in health care settings should ensure that the antenatal clinics are provided with enough staff to render quality care to women with recurrent pregnancy loss.
- Virtual support cannot be disputed as many young women have access to different online programs to support during pregnancy loss. Health care providers should guide women at the antenatal clinic to online sites that will benefit them during pregnancy and pregnancy loss and discuss these platforms during antenatal visits.
- Health care settings should encourage peer group support for women to share their experiences with each other to be able to cope with pregnancy loss.
- Counselling women with recurrent pregnancy loss will contribute to positive pregnancy outcomes in subsequent pregnancies because women will be able to find closure and heal from the loss. After counselling women may be able to focus and start planning for a new pregnancy whenever she is ready.
- Managers should ensure that health care settings are provided with enough staff to be able to render quality care to women with recurrent pregnancy loss.

4.4.2 Recommendations for midwifery practice

Findings indicated a lack of information from midwives leading to the following recommendations:

- Midwives should undergo training to strengthen their knowledge on pregnancy loss and provide quality care to women with recurrent pregnancy loss to enable these women to make informed decisions during subsequent pregnancies.
- Health care providers should empower midwives in their settings to intervene during pregnancy loss, identify women with recurrent pregnancy loss during antenatal visits,



and provide information needed by these women. Midwives should initiate one on one sessions with women with recurrent pregnancy loss and ensure that their individual needs are met, providing physical, emotional, and psychological support to provide hope for a positive pregnancy outcome in a subsequent pregnancy.

- Health care providers should strengthen support programmes to allow women with recurrent pregnancy loss to access online health related information that would prevent future pregnancy losses and guide women with recurrent pregnancy loss.
- Support programmes should be formulated online with guidance from trained midwives and other health care practitioners trained to care for women with recurrent pregnancy loss
- Midwives should determine a support system for women with recurrent pregnancy loss to assist with emotional support and refer women who need additional services such as social workers and psychologists.
- The findings indicated that women often resort to cultural sources such as traditional healers and the church to seek information and support during recurrent pregnancy loss. Midwives and other health care providers should provide care that is culture sensitive by acknowledging other sources used by women with recurrent pregnancy loss to be able to provide guidance while providing care to the women.

4.4.3 Recommendations for further research

Further research needs to focus on the impact of information provision through public health and online platforms as an initiative to promote positive practice in pregnancy outcome to women with recurrent pregnancy loss. There is a need to formulate guidelines and policies specific for Basic Antenatal Care (BANC) that will guide midwives in the care of women with recurrent pregnancy loss.

4.5. IMPLICATIONS OF THE STUDY

The results of the study revealed that women with recurrent pregnancy loss lack information and support. Midwives should engage with other health care providers to address challenges in holistic care as psychological needs for information and support for women after pregnancy loss are ignored once the women recovered. In addressing these challenges both the community and health care settings will benefit through a decrease in recurrent pregnancy loss and an improvement in the wellbeing of women experiencing pregnancy loss.



4.6 LIMITATIONS AND STUDY STRENGTH

The study was conducted in one Academic Hospital in the Tshwane Gauteng province where 20 pregnant women with a history of recurrent pregnancy loss were interviewed. Although the institution caters for a wide variety of district hospitals and surrounding antenatal settings including provinces such as Northwest and Limpopo, there are possibilities that findings may differ if conducted in Academic Hospitals in other provinces. The experiences of these women of childbearing age and with two or more pregnancy losses serve as strength of the study as they can share more detailed information on pregnancy loss.

4.7 FINAL CONCLUSION

The purpose of the study was to explore the information women receive after recurrent pregnancy loss in an Academic Hospital in Tshwane, South Africa. A qualitative study was conducted, and thematic analysis applied to analyse the collected data. The results of the study revealed that women with recurrent pregnancy loss lack information from midwives and other healthcare providers. There is also a need to improve written information and support programmes available for women with recurrent pregnancy loss. The lack of information and support led to an increase in recurrent pregnancy losses. The study therefore concluded that women need information after recurrent pregnancy loss, measures to improve the information provided and additional sources.



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ANNEXURE A: ETHICAL APPROVAL FROM UNIVERSITY OF PRETORIA



Faculty of Health Sciences

Institution: 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
- Expires 03/20/2022.
 IORG # IORG0001762 OMB No. 0990-0279
 Approved for use through February 28, 2022 and Expires: 03/04/2023.

24 November 2020

Approval Certificate New Application

Ethics Reference No.: 479/2020

Title: Information women receive after recurring pregnancy loss i the antenatal setting of an academic Hospital in Tshwane . South Africa

Dear Mrs SM Maphosa

The **New Application** as supported by documents received between 2020-10-14 and 2020-11-18 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on 2020-11-18 as resolved by its quorate meeting.

Please note the following about your ethics approval:

- . Ethics Approval is valid for 1 year and needs to be renewed annually by 2021-11-24.
- Please remember to use your protocol number (479/2020) 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, monitor the conduct of your research, or suspend or withdraw ethics approval.

Ethics approval is subject to the following:

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

Downes

Dr R Sommers

MBChB MMed (Int) MPharmMed 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)

Research Ethics Committee Room 4-80, Level 4, Tswelop ele Building University of Pretoria, Private Bag x323 Gezina 0031, South Africa Tel +27 (0)12 356 3084 Email: deepela behari@up.ac.za www.up.ac.za

Fakulte it Gesond heidswetenskappe Lefapha la Disaense tša Maphelo



ANNEXURE B: PERMISSION TO CONDUCT RESEARCH



Dr. George Mukhari Academic Hospital

Office of the Director Clinical Services

Enquiries : Dr. C Holm Tel : (012) 529 3876 Fax : (012) 560 0099

Email:Christene.Holm @gauteng.go.za keitumetse.mongale@gauteng.gov.za

To Ms SM Maphosa

Department of Health Sciences University of Pretoria

Date :22 January 2021

PERMISSION TO CONDUCT RESEARCH

The Dr. George Mukhari Academic Hospital hereby grants you permission to conduct research on "Information women receive after recurring pregnancy loss in the antenatal setting of an academic hospital in Tshwane, South Africa at Dr George Mukhari Academic Hospital.

This permission is granted subject to the following conditions:

That you obtain Ethical Clearance from the Human Research Ethics Committee of the relevant University
That the Hospital incurs no cost in the course of your research
That access to the staff and patients at the Dr George Mukhari Hospital will not interrupt the daily provision of services.
That prior to conducting the research you will liaise with the supervisors of the relevant sections to introduce yourself (with this letter) and to make arrangements with them in a manner that is convenient to the sections.
Formal written feedback on research outcomes must be given to the Director: Clinical Services
Permission for publication of research must be obtained from the Chief Executive Officer
Yours sincerely

DR. C. HOLM
DIRECTOR CLINICAL SERVICES
DATE:



ANNEXURE C: PARTICIPANT'S INFORMATION LEAFLET AND INFORMED CONSENT FORM:

PARTICIPANT'S INFORMATION LEAFLET AND INFORMED CONSENT FORM: A NON-INTERVENTION STUDY

STUDY TITLE: Information women receive after recurring pregnancy loss in the antenatal setting of an academic hospital in Tshwane, Gauteng

Principal Investigators: Ms S.M Maphosa

Institution: School of Nursing

TELEPHONE NUMBER(S):

Cellular number: 0731668962

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

Date	Month	Year		Time:
Dear	date	of consent pro-	cedure	//

1) INTRODUCTION

You are cordially invited to participate in a research study on the above tittle. The purpose of this leaflet is to make you fully understand what the study is all about. If you like to participate. Before you agree to be part of the study, please make sure you understand what is involved The research study will be conducted in the form of scheduled individual interview sessions and the investigator needs to clarify you on any misunderstanding before any agreement on participating in the study. If you have questions to ask do not hesitate to ask the investigator



2) THE NATURE AND PURPOSE OF THIS STUDY

The objective of the study is to explore and describe the support and treatment of women with recurring pregnancy in the antenatal setting in an academic hospital in Tshwane. This will allow the investigator to learn more about the information needs after pregnancy loss. This could prevent future pregnancy losses.

3) EXPLANATION OF PROCEDURES TO BE FOLLOWED

This study involves answering some questions about information you need on pregnancy loss and your experience on the loss at the antenatal setting as well as communication challenges experienced between yourself and the midwives during and after the pregnancy loss. I would like to use an audiotape to record our conversation and to listen to it later and therefore I request your permission to do so.

4) RISK AND DISCOMFORT INVOLVED

The investigator will ensure that there is no risk involved to those participating in the study. The interview will last for 30 to 45 minutes Verbal and written communication will be the only means that will be used during the interview. No invasive procedures or tests will be involved. In case of any participant experiencing emotional trauma, they will be referred to hospital psychologist.

5) POSSIBLE BENEFITS OF THIS STUDY

The recommendations to the study will propose that midwives in the ANC setting give adequate information to women after pregnancy loss and make the information accessible to all in a language better understood by them. This will assist women in decision making about future pregnancy and may contribute the reduction in the recurrence of pregnancy losses. However, there is no compensation to the study participation is strictly voluntary to prevent any biasness.



6) HAS THE STUDY RECEIVED ETHICAL APPROVAL?

The study has received approval and followed all ethical standards of the Ethics committee of the University of Pretoria. The contact detail is: 012 356 3084 alternatively they may be contacted on 012 356 3085. The antenatal setting in Tshwane contact details are 012 529 3269 or 012 529 3111 for the Department of Health. The research study is guided by Declaration of Helsinki guiding the investigator on research procedure involving Human Subjects. Copies are available from the investigator on request.

7) INFORMATION

If I have any questions concerning this study, I should contact: Stephina Maphosa at 0731668962

8) CONFIDENTIALITY

In the study the participants will not be called by their real identity. Records and reports on participant's information will be kept away from public access. Final reports for audiences will not display the names of the participants.

9) CONSENT TO PARTICIPATE IN THIS STUDY

I confirm that I have been given information on the objective of the study the procedures that will take place, the risks and discomfort in the study and the benefits of the study. Being given information on all aspects of the study and having full understanding of what the study entails from the person asking for my consent I voluntary agree to participate in the study. I agree to participate in free will and may withdraw from the study any time during the study without being affected by it. I also understand and have read about confidentiality of my records and my identity during the study. The consent form was signed by me, and a copy of the signed consent given to me. I have been given opportunity to ask questions and with no objection to all information communicated to me.



Patient name	Date
Patient signature	Date
Investigator's name	Date
Investigator's signature	Date
Mittage was and simple	
Witness name and signature	Date



VERBAL PARTICIPANT INFORMED CONSENT (applicable when participants cannot read or write)

I, the undersigned, Mrs./Ms		have read and have explained
fully to the participant, named	and/or her relat	ive, the participant information
leaflet, which has indicated the	nature and purpose of the st	udy in which I have asked the
participant to participate. The ex	xplanation I have given has r	nentioned both the absence of
risks and benefits of the study. T	he participant indicated that s	he understands that she will be
free to withdraw from the study a	t any time for any reason and	without jeopardizing her needs.
I hereby certify that the participal	nt has agreed to participate in	this study.
Participant's Name		
((Please print)	
Participant's Signature		Date
Investigator's Name		
(Ple	ease print)	
Investigator's Signature		Date
Witness's Name	Witness's Signature	Date
(Please prir	nt)	
(Witness - sign that he/she ha	is witnessed the process of	informed consent)



ANNEXURE D: INTERVIEW GUIDE
INTERVIEW GUIDE

Proposed interview questions for the study

Main question

What information did you receive after your pregnancy loss?

Probing questions

- In your own judgement do you think women need information after pregnancy loss. Yes, or no and why do you say so?
- If women are receiving information after pregnancy loss, how helpful can this information be?
- When should this information be given to the women after pregnancy loss and why do you say so?
- What do you think about information on the leaflets handed over at clinics and hospitals?
- With the current improved technology can the information needs of women after pregnancy loss be fulfilled by media interaction. Yes, or no. Why do you say so?
- Explain how information concerning recurrent pregnancy loss was shared by health professionals.
- Describe how you would like information to be shared in the antenatal setting?
- Explain programs that you have knowledge of at the antenatal setting that are offered to women with pregnancy loss.



ANNEXURE E: INDIVIDUAL INTERVIEW

PARTICIPANT 15 (first five pages)

Interviewer: Good Morning Mam. How are you?

Participant: Am fine and you?

Interviewer: I am fine. My name is Stephina Maphosa. I am a Masters Student from the University of Pretoria. We have already discussed the consent form. I explain to you the tittle of the study is the Information women receive after recurring pregnancy loss in the antenatal setting of the academic hospital in Tshwane ... uhm we have discussed the purpose of the study and then I explained to you that the purpose of the study is to explore and describe the support and treatment of women with recurring pregnancy loss in the antenatal setting of this hospital. Uhh ... we also spoke about the procedure that we going to follow, and I just explain to you that am not going to use any invasive procedure we just going to be a question-and-answer session so feel free to communicate as much as you can and then you are also free to ask questions if you want to ask any questions neh ...? And then with the risk and discomfort I explained to you that there is no risk involved as I said I am not going to do any invasive procedure. The benefit of the study is going to benefit the women that uhh ... women who will be pregnant and having the problem of recurrent loss uhh ... it can possibly not uh ... uh ... uh ... benefit you at the moment because you are already pregnant and then you are expecting the baby soon neh ...?

Participant: Yes

Interviewer: And then my study has received uhm ... ethical approval from the University of Pretoria uhh... from this institution ... uhh ...from ... uhm ... and I also explain to you that confidentiality will always be maintained. There is no way that am going to mention your name as much I couldn't mention the name of the hospital and just saying 'the academic hospital' in Tshwane neh? And then agreed and then you signed the consent form neh? That questions that am going to ask are probing questions probing question are questions that I will ask you a question



and ask you to support uhh ... the answer that you gave me. Uhm ... as I already introduced myself as Sister Maphosa. Uhh ... which name can I call you?

Participant: Memory

Interviewer: You prefer me to call you Memory. Uhm ... Ohk ... I would like to ask you before we can go any further to give me just a brief of what really occurred/happened with your previous losses? You had two previous miscarriages and the first one if I remember well was at six weeks neh ...? And the second one was at six weeks? So can you just give me a brief of what really happened on both uhh ... incidents.

Participant: English or Tswana?

Interviewer: Uhh ... you can speak English and then you can also speak Tswana but then I can see that you are fluent with English I think English will be fine.

Participant: Ohk ... uh ... the first miscarriage I was playing netball with my friends Saturday afternoon.

Interviewer: Ohk ...

Participant: I started hearing pains back like pains I say no maybe am tired. I just sit down after some few minutes my friend told me that haa ... you are bleeding I say haa ... am bleeding was sitting on the pavement that's when I start to hear pains, pains and then blood too much blood like clots.

Interviewer: Ohk ...

Participant: Before I go to the Hospital the clots were already out when I go to the hospital there, they send me to Odi that's where they did whatever they did they clean me whatever. The second one I was in a taxi.

Interviewer: Ohk ...



Participant: These pains are what I started to hear on my previous miscarriage last year. I just ignore and when I get home, I told my mom uhh ... Sendra lets go to the clinic and before we can get there was already bleeding.

Interviewer: Ohk, so when you tell your mom you were not bleeding then ...?

Participant: No, but when we were on our way the hospital that's when I start bleeding.

Interviewer: Ohk so both of them happened nearly the same way neh?

Participant: Yaa.

Interviewer: Ohk, uhh ... from what you have told me about your uhh ... previous loss uhh ... am sorry about that its quite uh ... uh ... a quite uhm ... experience that you went through. So uhm ... the thing that I'd like to know is what information did you receive after your pregnancy losses?

Participant: I don't know if it was a counsellor or a specialist after you go there and he was like Ohh ... don't worry like after like a miscarriage you need not to worry you can have another baby and then they give me some pills to drink and clean the I don't know if it's the womb or what? So fine after they counselled me like they.

Interviewer: So, they counselled you at the hospital?

Participant: Yaa

Interviewer: Ohk, and then with the second one?

Participant: They did the same and like it was the same old doctor from Hospital, was the one who was counselling me.

Interviewer: So, did you get any information from the nurses from the midwifes with regard to support and maybe uhh ... counselling or any situation?

Participant: No, only the doctors were the one they admitted me there it was like midnight it was nearly half past nine to 10. So, the nurses were I don't know sleeping or what only the doctors were able to speak to me alone. They were able to counsel me and tell me it's not the end of the world you can have another baby your age still qualifying for another baby neh?



Interviewer: Uhh, yes you can continue Mam.

Participant: Uhh the midwife.

Interviewer: Ohh they just tell you the midwife?

Participant: Ahh Mam.

Interviewer: You don't remember them talking to you ohk, so you came today and then you were

discharged tomorrow?

Participant: No after three days.

Interviewer: Ohh, you stayed for three days. Ohk ... were there any complications?

Participant: Yaa ... the pain and the neck, my back pain like I was having pains like on the back and this side and then they said maybe is, they said it's what I don't even know doctors' language

they said maybe my womb is doing what ...

Interviewer: Ohk

Participant: After they clean me with that thing, they said maybe it's still recovering or what ...

Interviewer: Ohk alright. So uhm ... in your own judgement do you think women need information

after pregnancy loss?

Participant: Yaa, I think they do so that they can know what to do after loss and that ...

Interviewer: Ohk, so that you should know what to do after pregnancy loss neh?

Participant: Yaa.

Interviewer: So, if women are receiving information after pregnancy loss how can it be helpful to

them?

Participant: So that you should be able know after pregnancy you don't have to carry heavy things or sleep with someone immediately after you have discharged or, I don't know ahh ... I think for the for you to know more information after you been discharged.



Interviewer: So, you'll know more information on what to do and what to expect neh? Ohk, just to prevent what will happen is what you are saying. When should this information be given after pregnancy loss and why do you think so?

Participant: I think after maybe they clean you and the explain whether uhh ... Eish ... I don't know how to put it [laughing]

Interviewer: So, what I mean according to you when should this information be given to you?

Participant: I think maybe after the loss or before when you are there at the ANC booking or when we are sitting down like now maybe someone just explain after this and this and this it happens you must expect this and this and this and then after that maybe when you had a loss, they will tell you maybe more information when you are there.

Interviewer: Alright. So, what do you think about information on the leaflets handed over at the clinic, have you have you ever received any pamphlets at the clinic?

Participant: No which one?

Interviewer: Anything that have information did they give you at the clinic, like uhh ... maybe that you can read about advantage to the pregnancy or maybe prevent uhh ... the risk in during your pregnancy of losing your baby or the pregnancy?

Participant: No, I don't remember.

Interviewer: So, you haven't received any leaflets neh?

Participant: No.

Interviewer: So, if you can see now, we have this current technology neh? So, with the current technology can information needs of women after recurring pregnancy loss be fulfilled by media interaction? You understand the question? So, what I mean is now we are during the time of social media people uhh ... communicate through social media people get information from the internet uh ... people communicate through groups on Facebook so can this platform be used uhh ... spreading of information to women especially when it comes to pregnancy loss.



ANNEXURE F: EDITING CERTIFICATE



B-Square Synergy Consultants

Tax no: 93 087 48 228

Idea. Concept. Product

LETTER FOR EDITING OF THE DISSERATION OF STEPHINA MOTLHAKE MAPHOSA

INFORMATION WOMEN RECEIVE AFTER RECURRING PREGNANCY LOSS IN THE ANTENATAL SETTING OF AN ACADEMIC HOSPITAL IN TSHWANE, SOUTH AFRICA

Submitted in fulfilment of the requirements for the degree: MAGISTER CURATIONS (MCUR) in Advanced Midwifery and Neonatal Science, Faculty of Health Sciences Department – Nursing, University of Pretoria.

17 June 2022

To whom it may concern

I have edited the dissertation of Stephina Motlhake Maphosa, for her degree MAGISTER CURATIONS (MCUR) in Advanced Midwifery and Neonatal Science, Faculty of Health Sciences, Department of Nursing, University of Pretoria, and I have sent her and her Study Leader(s) my comments/suggestions.

Kind regards

Dr. Liesl Brown,