Contents lists available at ScienceDirect



International Journal of Africa Nursing Sciences

journal homepage: www.elsevier.com/locate/ijans



Barriers to using antenatal care services in a rural district in Zimbabwe



Jesca Mutowo, Mariatha Yazbek^{*}, Annatjie van der Wath, Carin Maree

Department of Nursing Science, Faculty of Health Sciences, University of Pretoria, South Africa

ARTICLE INFO

Keywords: Maternal care Antenatal care Barriers to antenatal care Qualitative research

ABSTRACT

Background: In Zimbabwe women still initiate antenatal care (ANC) after twelfth weeks of pregnancy. Few women return for repeat visits. Early and timely ANC ensure early detection and management of high-risk pregnancies. The study explored the barriers to use of ANC services by pregnant women to obtain baseline data for developing context specific initiatives to enhance ANC utilisation. *Method:* The qualitative study answered the question 'What are the barriers towards utilisation of maternal healthcare services?' Purposive sampling was used to recruit community members (men, chiefs, councillors and politicians), maternal healthcare providers (midwives, traditional birth attendants and village health workers) and postnatal women. After ethical approval was obtained, data was generated through focus group discussions using interviews. Thematic analysis was used to analyse the data.

Findings: The four themes included barriers related to maternal healthcare providers, maternal healthcare users, social support systems and belief systems. Disrespect for maternal healthcare users, lack of resources at health facility, user insufficient knowledge, fear of HIV testing by both the user and partners, poverty, household responsibilities, lack of spousal support and involvement and failure to integrate traditional and religious knowledge in healthcare practices prevent women from utilizing ANC services in rural Zimbabwe.

Conclusion: The study provides evidence that barriers to utilisation of ANC services are not solely rooted in the individual but are multifaceted covering maternal healthcare providers related barriers, support system related barriers, cultural related barriers and religious related barriers. A multisectoral approach to enhance utilisation of ANC services timely and regularly is recommended.

1. Introduction

Current antenatal care (ANC) guidelines recommend that pregnant women attend their first ANC visit in the first trimester, followed by two visits in the second trimester and five visits in the third trimester (WHO, 2016). Globally, 85% of pregnant women reportedly access ANC services, but few women have their first antenatal visit in the first trimester or complete the recommended minimum of eight antenatal visits (WHO, 2016; UNICEF, 2018). In Zimbabwe, 89% of pregnant women attended ANC services at least 4 times, but only 39% of women had their first ANC visit in the first trimester (ZIMSTAT & ICF International, 2016). Early ANC services are crucial to detect early warning signs and inform pregnant women about appropriate healthcare and possible complications that may be encountered during pregnancy. Although the value of early ANC visits is recognised and antenatal health services are available, uptake of services in developing countries remains a problem (Moller, Petzold, Chou & Say, 2017).

Research conducted in Ghana by Nketiah-Amponsah, Senadza and Arthur (2013) ascertained that age, ownership of health insurance (especially for rural women), educational attainment, birth order and religion were indicators of ANC services utilisation. For example, the study noted that possession of a health insurance by rural women increased utilisation of antenatal care services. Zimbabwean studies located by the authors of this article elucidated some of the factors associated with late antenatal care bookings. A study conducted in an urban area in Zimbabwe by Mandoreba and Mokwena, (2016) found that almost half of the women in the study initiated antenatal care late, despite most of the women having secondary education and access to ANC services. Over a third of the women who booked their first antenatal care visit after 24 weeks in this study mentioned high costs of antenatal care as a barrier to utilisation. In a study assessing accessibility factors in a rural area, women did not initiate early antenatal care because of transport challenges and myriad of problems with the quality of the healthcare services (Nyathi, Tugli, Tshitangano & Mpofu, 2017).

* Corresponding author. E-mail address: Mariatha.Yazbek@up.ac.za (M. Yazbek).

https://doi.org/10.1016/j.ijans.2021.100319

Received 24 January 2020; Received in revised form 23 March 2021; Accepted 18 April 2021 Available online 28 May 2021 2214-1391/© 2021 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-ac-ad/4.0/). In this study, the authors qualitatively assessed the perceptions of community members, maternal healthcare providers and postnatal women to explore barriers towards utilisation of ANC services in the Mhondoro-Ngezi district, a rural district in Zimbabwe. A qualitative approach was adapted for this study. This approach was chosen because it allowed the researcher to explore the participants' experiences on maternal healthcare services utilisation.

2. Materials and methods

A qualitative, exploratory and descriptive design was used for this study to explore perceptions of the community members, maternal healthcare providers and postnatal women to describe the barriers. This approach was chosen because it permitted information sharing between the researcher and the participant, thereby affording them both an opportunity to share and learn (Khan & Chovanec, 2010: 35).

Multi-stage sampling was used to choose the district with the highest maternal mortality in Mashonaland West. Multi staging sampling method is widely used in household and health surveys when there exists no sampling frame or when the population is scattered over a wide area (Chauvet, 2015:2484). In this study, the population was scattered over Mashonaland West Province, According to ZIMSTAT (2012:129), Mhondoro-Ngezi has the highest maternal mortality in the province, recording a maternal mortality ratio of 661 per 100 000 (ZIMSTAT, 2012:129) and served as the study context. Mhondoro-Ngezi district has one district hospital, namely St. Michaels Mission Hospital. The study was conducted at primary and secondary levels, Murambwa Clinic and St. Michaels' Mission Hospital respectively in Mhondoro-Ngezi district in Mashonaland West Province of Zimbabwe. The rational for conducting the study at both primary and secondary levels of care was to obtain a wider picture of maternal healthcare utilisation in the district. Maternal healthcare services offered at both the study sites include antenatal, delivery and postnatal care. During the antenatal period, routine screening and examination, provision of tetanus toxoid vaccines, prevention of maternal to child transmission (PMTCT) of the human immunodeficiency virus (HIV), urine tests, haemoglobin test, screening for syphilis (rapid plasma reagent test), health education talks on issues arising and provision of anti-malaria prophylaxis are offered to pregnant women.

2.1. Participants and recruitment

Eight community members (men, chiefs, councillors and politicians), eight five maternal healthcare providers (midwives and village health workers) and postnatal women involved in the provision and use of ANC services were purposively selected to attend three focus group discussions. The rationale for choosing a purposive sampling method was to intentionally select participants who the researcher deemed had the relevant information (Creswell, 2012:206) on maternal healthcare services utilisation. The study targeted population were maternal healthcare providers (midwives, traditional birth attendants and village health workers), community members (men, chiefs, councillors and politicians) and post-natal women. Village health workers are voluntary members of the community who are selected, trained and work in the communities they reside. Although traditional birth attendants were invited, none were available for the discussions. It was difficult to recruit maternal healthcare providers and postnatal women for the focus group discussions at St. Michaels' Mission Hospital. To address this challenge, the focus group discussions with postnatal women and maternal healthcare providers were conducted at Murambwa clinic while the focus groups with community members were conducted at St Michaels' mission hospital. Postnatal women were recruited for the focus group discussions on the basis that they had experiences during pregnancy, deliver and after delivery. Each focus group consisted of six to ten participants, in line with Morgan (2013:15) recommendation that a group size of below 6 may be difficult to sustain a discussion and above 10 may be

difficult to control. One focus group discussion at St Michaels Mission consisted of eight community members and was conducted first. Two focus group discussions with maternal healthcare providers and postnatal women were conducted at Murambwa clinic and consisted of eight maternal healthcare providers and five postnatal women respectively. The focus group discussions at Murambwa clinic took place a day after the focus group discussion at St Michaels' mission hospital. Two focus group guides were used during the discussions. One guide was used with maternal healthcare providers and postnatal women, and the other one with community members.

2.2. Data collection and analysis

Prior to data collection, ethical clearance was sought from the Ethics Committee of the Faculty of Health Sciences, University of Pretoria (Ethical reference number 181/2016) and the Medical Research Council of Zimbabwe (Approval number MRCZ/A/2095) to protect participants from ethical violations. The study site was approved by the Zimbabwe Ministry of Health and Child Care and community leaders. Informed consent forms were signed by the participants to indicate their willingness to participate in the study and they were aware they could withdraw any time with no penalty. The core question for all three focus groups was; "What are the reasons pregnant women do not attend antenatal care early and regularly?" The question was followed with probing questions to explore for clarification or depth.

The focus group discussions were conducted over three working days. At the end of each focus group discussion session, there was debriefing between the researcher and the research assistant to address observations made and any challenges faced. The first author and a research assistant moderated the discussions. The research assistant has a diploma in midwifery and was orientated to the research a day before the field visit. The discussions lasted between 60 and 90 min. The participants expressed their perceptions of maternal healthcare services use in their own words using the indigenous language, Shona. All discussions were audio-recorded after seeking permission from the participants, to capture all information. To ensure confidentiality the documents did not include the participants' names, but codes were used instead. Data saturation was reached when the same ideas were repeatedly expressed after three focus groups.

The data were transcribed verbatim and then translated into English from the vernacular language, Shona, by the first author. The first author and an independent coder used Tesch's method of content analysis to identify themes. Tesch's method was chosen over data analysis software because the researchers were familiar with the method. Peer debriefing was conducted to discuss the codes and categories to reach consensus on the findings.

2.3. Trustworthiness

The criteria used to measure trustworthiness of this study are selected from an array of indicators. The researchers used an established research method and provided enough detail to allow the reader to judge its reliability. For dependability, an independent coder analysed the data and a consensus discussion took place to reach consensus regarding the findings. Field notes, journals and meeting minutes were available. To enhance credibility, the researchers meticulously managed the data and applied rigorous analytical techniques (Bhattacherjee, 2012:110). The interviews were transcribed verbatim and the densely descriptions are available for an audit if needed. The densely described methodology and study context can be transferred to other settings. Authenticity of the study emerged in the write-up when the excerpts of focus group discussions were included. For confirmability, the participants, clinic and hospital authorities confirmed the findings.

3. Results

Data was generated using Shona language from discussions with eight community members, eight maternal healthcare providers and five postnatal women. The question was, 'What are the barriers towards utilisation of maternal healthcare services?' The demographic characteristics of the participants are presented in Table 1. The participants' age ranged from 17 to 74 years which shows that maternal health care experiences of both the young and older people were captured in the focus group discussions. They were more females than men in the study. This was expected as the study sought barriers to utilisation of maternal health care services. Half 11(50%) of the participants had higher education and this could have affected in-depth exploration of the barriers.

In this study four themes were identified from the data analysis, namely, maternal healthcare system related barriers, maternal healthcare users related barriers, social support systems related barriers and belief systems related barriers. These themes were further analysed into categories and sub-categories (Table 2). The findings are supported by verbatim quotations indicating the number and designation of the participant in brackets, namely, community member (CM), maternal healthcare provider (MHP) or postnatal woman (PNW). The findings under the mentioned themes are presented.

3.1. Maternal healthcare system related barriers

Discussions on the key findings of maternal healthcare system factors in theme 1 found that women who seek health care during pregnancy face a plethora of barriers and some of which were revealed in this study.

Question: What are the reasons pregnant women do not seek care when they encounter health problems?

Barriers related to the maternal health care factors revolve around antenatal care barriers, health care staff practice deficits and cost barriers.

3.1.1. Antenatal care barriers

Question: Why are women in this community reluctant to attend antenatal care clinics?

Table 1

Demographic	characteristics	of focus	group	participants.

Demographic information	Maternal healthcare providers (MHP)	Postnatal women (PNW)	Community members (CM)
Number of participants n = 21	n = 8	n = 5	n = 8
Age range	34-63 years	17-28 years	32–74 years
	(Average: 49)	(Average: 22)	(Average: 56)
Gender	7 Women	5 Women	2 Women
	1 Man		6 Men
Marital status	5 Married	4 Married	6 Married
	3 Widows	1 Single	1 Divorced
			1 Single
Level of Education	3 Form 4	3 Form 4	5 Form 4
	5 Grade 7	2 Form 3	1 Form 3
			2 Grade 7
Employment	2 Registered nurses	4 Housewives	1 Headman
	/ midwives	1 Unemployed	1 Retired teacher
	6 Village health		4 Peasant
	workers		farmers
			1 Housewife
			1 Unemployed
Religion	3 Methodist	3 Apostolic Faith	2 Anglican
	2 Anglican	Mission	1 Roman
	1 Johane Masowe	1 Johane	Catholic
	Apostolic	Masowe	2 Christian
	1 Salvation Army	Apostolic	1 Methodist
	1 Roman Catholic	1 None	2 Apostle
Number of own children	2-7 (Average: 4)	1-3 (Average: 1)	2-7 (Average: 4)

Table 2

Barriers to using antenatal care services in Mhondoro-Ngezi District, Zimbabwe.

Themes	Categories	Sub-categories	
Maternal healthcare system related barriers	Antenatal care barriers	Quality of service delivery	
		Human resources and essential equipment	
		Presence of male midwives	
	Healthcare staff barriers	Staff not respectful	
		Poor information sharing with women	
	Cost barriers	Perceived cost barriers	
		Need to stay at waiting home	
		from women's own pockets	
Maternal healthcare user	Insufficient	Lack of knowledge about	
related barriers	knowledge	pregnancy and ANC	
	Attitude barriers	Fear of HIV and rejection	
		Burden of ANC visits	
		Perceptions regarding ANC	
Social support system	Spousal support	Lack of spousal support and	
related barriers	barriers	involvement	
		Spousal reluctance to HIV testing	
	Socio-economic	Poverty	
	barriers		
Belief system barriers	Cultural barriers	Traditional beliefs	
		Traditional practices	
		Traditional preferences	
	Religious barriers	Spiritual beliefs	
		Spiritual practices	

Findings revealed three sub-categories under antenatal care barriers. Participants complained about quality of service delivery, availability of human resources and essential equipment and presence of midwives.

3.1.1.1. Quality of service delivery. Women in this study were reluctant to seek ANC services because of long waiting times. A participant reported that the nurses wait until there are many women to treat before they open the ANC clinic.

CM 3: 'What happens is when people come in the morning they are told to wait until they are more people. Most of the time people spent the whole day waiting for others to come. People do not come because of that.'

PNW 1 and 3: 'Women usually say today I am not going to scale because even if I go there early, I will come back home at six in the evening. That is the problem women encounter here.'

The same sentiments raised in this study were expressed by participants in studies in India (Bhattacherjee, Datta, Saha & Chakraborty, 2013:82), South Africa (Tsawe & Susuman, 2014:6), Nigeria (Okonofua et al., 2017:2) and Ghana (Ganle, Parker, Firztpatrick & Otupiri, 2014:1) where participants attributed poor utilisation of services to long waiting times. Contrary to the above findings, Mason et al. (2015:5) reported that women in their study in Western Kenya reported that they received care in good time and did not spend longer time at the clinic.

3.1.1.2. Human resources and essential equipment. Shortages of resources such as skilled staff, drugs and essential equipment were cited as some of the reasons why pregnant women did not see the need to seek health care services.

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

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

Despite St. Michaels being a district hospital, where minor surgeries should be performed, the hospital did not have a functional operating theatre as indicated by the following statement:

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

Consistent with findings from this study, a study conducted in

International Journal of Africa Nursing Sciences 15 (2021) 100319

Tanzania by Mselle, Moland, Mvungi, Evjen-Olsen and Kohi (2013:9) revealed that shortage of staff and other resources attributed to poor birth outcomes. In a study conducted in Ethiopia (Austin et al., 2015:5), participants reported lack of trained personnel to respond to emergencies.

3.1.1.3. Presence of male midwives. Question: What are women's views regarding being examined by a male nurse?

Participants revealed that women are uncomfortable with being examined by a male midwife and would not seek ANC services if a male midwife is on duty.

PNW 5: 'To tell you the truth, I did not want to come to clinic to book because I was afraid that when I come here Mr [name deleted] will touch my abdomen as he tried to check the baby's position. I would say I will go when there is sister [female nurse] on duty.'

Similarily, parturient women in a study conducted in Eastern Cape in South Africa by Alabi, O'Mahony, Wright & Ntsaba, 2015:5) reported that they did not like to be examined by a male nurse or a male doctor. Contrary to the above assertion, women in a study conducted by Kululanga, Sundby, Chirwa, Malata and Maluwa (2012:5) in Malawi, did not mind being attended to by male midwives. They pointed out that male midwives treated them with respect and dignity and did not talk of what happened in labour and delivery ward.

3.1.2. Health care staff practices barriers

Question: What do health care staff do that discourage women to return for antenatal care?

Disrespect towards women seeking antenatal care and not giving women comprehensive information on what women should do to ensure a healthy pregnancy were cited as the reasons some women in the district shun health facilities.

3.1.2.1. Staff not respectful. Participants mentioned that women do not seek ANC services because they perceive the nurses as impatient and harsh. Yet the International Confederation of Midwives (ICM) Essential Competencies for Basic Midwifery Practice (2010:2) identified the roles of a midwife as working in partnership with women and respecting their dignity. Despite an increase in programs to improve the attitudes of nurses and midwives in most health facilities worldwide, literature reports of women complaining of disrespect displayed towards women during pregnancy and delivery. Unfriendly health personnel attitude creates fear in women and helplessness as evidenced by the following extracts:

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

One postnatal woman stated that, 'Pregnant women are sometimes not treated well for no apparent reason.'

Staff disrespect towards pregnant women have been associated with more home deliveries and a subsequent increase in maternal and neonatal morbidity and mortality as observed by Mannava, Durrant, Fisher, Chersich and Luchters (2015:2). Disrespect towards women displayed by nurses were identified as having a detrimental effect on the use of maternal healthcare in Ghana and South Africa (Ganle, et al, 2014:1, Tsawe & Susuman, 2014:9).

3.1.2.2. Poor information sharing with women. A nurse also remarked that nurses sometimes disseminate health information poorly. For example, nurses may omit to mention the review date, yet she/he will write the date in the woman's maternity card.

MHCP 8: 'Sometimes it is the nurse's fault. When we have finished attending to the women, we may forget to tell them the review date, yet you will have written it down'.

While a community member said, 'If nurses treat women well, they will come to hospital.

Tsawe and Susuman (2014:8) also observed that women who had bad experiences with healthcare services before were unlikely to return.

3.1.3. Cost barriers

Question: Why are women in this community reluctant to attend antenatal care clinics?

3.1.3.1. Perceived cost implications. Participants revealed that some women do not use ANC services because they assume that they must pay for services despite the services being free.

CM 1: 'My neighbour nearly died at home because she did not have the money for booking and other costs that could be needed.'

MHCP 7 and CM 8: 'They should come early to book pregnancies because it is for free. They do not pay. These are the messages that we should tell them. Some of them think that they should look for money.'

Contrary to these findings, a study conducted in Ghana by Ganle, et al, (2014:13), revealed that despite free maternity services, women did not access healthcare services because they felt they were losing control over their healthcare to modern medicine.

3.1.3.2. Need to stay at waiting home from women's own pockets. Failure by hospital authorities to provide pregnant women residing in maternity home with food was cited as the reasons for poor utilisation of maternity waiting home.

Question: Why do pregnant women refuse to use maternity waiting homes?

Because of the distance women must travel to the hospital, they stay in a maternity waiting home close to their expected birth date. Basic commodities such as food are not available at these waiting homes, which reportedly hinder utilisation of ANC services. Women therefore choose to stay at home.

PNW 5: 'Women are reluctant to stay at the maternity waiting home [kumatumba]. There is no food and bringing food from home is a problem.'

Women feel ashamed of being too poor to buy food as the next quotation revealed,

MHCP 2: 'Sometimes you hear that a woman ran away and went back home. She will be ashamed to come and stay with others who will be eating better food while she does not have. She may prefer staying at home and come when in labour.'

In rural Zambia, women also complained of lack of food for pregnant women staying at the mothers' waiting homes as food was not provided by health facility authorities (Sialubanje, et al, 2015:9). The findings in this study are a cause for concern as maternity waiting homes shelter pregnant women who cannot access healthcare service because they live far away from a health facility.

3.2. Maternal healthcare user related barriers

The major findings in theme 2, maternal healthcare user barriers, are knowledge barriers and attitude that prevent them from visiting the ANC clinic. Knowledge barriers include insufficient knowledge on pregnancy, purpose, and importance of ANC. Attitude barriers include fear of HIV testing and rejection, perceptions on ANC visits difficulties and miss beliefs.

3.2.1. Knowledge barriers

Insufficient knowledge on pregnancy prevents pregnant women from seeking ANC.

Question: What information do pregnant women have on childbirth?

3.2.1.1. Lack of knowledge about pregnancy and antenatal care. Participants revealed that women lack knowledge regarding pregnancy. Firstly, some women are not aware that they are pregnant, as explained by a community member.

CM 6: 'Some women when they get pregnant, may not know that they are pregnant. They can go for months without knowing. So, when they start counting, they may be behind.'

Secondly, women are not aware of the purpose of attending ANC services or that they should return, or they think it is only necessary to seek ANC if there is a problem during pregnancy. The next quotation illustrates women's reasoning in this regard.

PNW 3: 'Some women ignore going to clinic to book their pregnancies. I think it is because they do not know why it is important to come and book early.'

Lastly, some women have low educational level and unable to read the instructions on the antenatal card.

PNW 4: 'They will not come back because they will not know when they are supposed to. Although the nurse would have written the review date on the card, but because the women cannot read, they will not know when to return.'

Consistent with these findings, Bhattacherjee, et al (2013:80) noted that in a study in Tea Gardens of Darjeeling, India, majority of women who did not attend antenatal and postnatal review did not know that they were supposed to.

Question: Who are the pregnant women preferred maternal health care providers?

Participants reported that some women do not attend ANC because they prefer the accessible traditional care provided by elderly community women. Participants explained,

PNW 5: 'Women prefer traditional birth attendants [mbuya nyamukuta] in the community.'

CM 1 and 5: 'They do not bother booking because they know that they will assist them. They help women with herbs to open the birth canal.'

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

3.2.2. Attitude barriers

Participants revealed that fear of HIV and rejection by partner or husband when HIV results are positive during routine ANC screening, burden of ANC visits and perceptions regarding ANC visits hinder utilisation of ANC services.

3.2.2.1. Fear of HIV and rejection. HIV testing in pregnancy is necessary for one to receive antiretroviral treatment, as early diagnosis and access to treatment reduces the risk of onward transmission (Evangeli, Pady & Wroe, 2015: 880). Some pregnant women reportedly do not book for ANC or return for subsequent visits because they are afraid of being tested for HIV at the health facility, as explained by a community member.

CM 7 and CM 5: 'Most people are still afraid of being tested for HIV. They are not willing to be tested. That is why they do not go to the hospital.'

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

Consistent with these findings, Gourlay, Birdthistle, Mburu, Iorpenda and Wringe, (2013:6) posit that women may refuse to take HIV test because of fear of rejection by family and their male partners if results are positive. Contrary to this behaviour, a study conducted in Ghimbi town, Ethiopia by Mitiku, Addissie and Molla (2017:6) showed that a desire to protect the unborn babies from HIV acted as enabler to HIV testing.

3.2.2.2. Burden of ANC visits. Others perceive repeated antenatal visits as a burden and procrastinate to book in time, as shared by maternal healthcare providers.

MHCP 5: 'They say, I will go later. Most of them come and book at five months.'

MHCP 7: 'Another woman I once asked said, 'I was reluctant to book my

pregnancy at three months. I delayed booking so that I will come to clinic less times.'

These findings provide an impetus for further research to inform reproductive health planners considering that WHO (2016:1) recommends a minimum of 8 contact visits that should be undertaken by pregnant women during pregnancy.

3.2.2.3. Perceptions regarding ANC. A community member commented that women are sometimes reluctant and even "lazy" to book for ANC.

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

Participants alluded that women sometimes think they know exactly what to do and do not need to attend ANC services.

CM 7: 'She appears as if she is the nurse. She tells you that she knows when she should go. Even when she is asked to come and wait here. She will say I will go when my days are due.'

Question: Why do pregnant women fail to return for subsequent antenatal care visits?

Participants cited absence of health problems as the reason women fail to attend repeat antenatal visits.

PNW 3: 'Why should I go back? What can be the problem? Nothing will affect me. One would be seeing everything being okay, so there would not be any need to come back.'

In a study conducted in Rwanda by Rwabufigiri, Mukamungo, Atahomson, Gautier and Semasaka (2016:3), women in the study had the mentality that pregnancy is not a disease hence they did not seek maternal healthcare services. Individual attitudes are known to also contribute to poor ANC attendance in Ethiopia (Dutamo, Assefa & Egata, 2015:) where 58.4% of the participants cited absence of problems for not attending antenatal care clinics.

Question: What responsibilities at home interfere with attendance of antenatal care visits?

Responsibilities at home may also deter women from using ANC services. They do not want to leave their fields which might be their only source of income or food. Women might also feel a sense of responsibility for relatives in their care.

CM 4: 'When it is ploughing time, some women may not want to abandon their fields. They will not go for scale [ANC clinic] because they will feel they will lag behind with their work.'

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

Consistent with these findings, studies conducted in Sudan (Wilunda, Scanagatta, Putoto, Monyalbetti, Segafreda, Takahashi, Mizerero et al, 2017:5) and Zambia (Sialubanje, et al, 2015:9) on utilisation of maternal healthcare services revealed that domestic chores, planting, weeding, harvesting and a need to take care of children at home prevent some women from seeking maternal healthcare services.

Question: What other reasons pregnant women do not seek ANC?

Participants commented that some women might be ashamed to be pregnant, reasons being older, very young, or still having young children. Comments included.

CM 3, 'In older women there is also an issue of shyness. They say how can I be seen by young people being pregnant?'

CM 4: 'Those who were impregnated while at school may not know what to do. Sometimes their husbands or boyfriends may be at work and they may not know what to do.'

MHCP 6: 'Another issue, maybe I have another child who is one year old and another is eight months and breast feeding. Can I go and book? No, it is not possible. I will be shy. One ends up waiting for labour to start and then go and deliver without booking.'

These findings mirror those in a study in Chipinge South district in Zimbabwe (Gore, Muza & Mukanangana, 2014:117) where women who got pregnant at an early age or at an older age were embarrassed to

utilise ANC services. Consistent with these findings in a study conducted in Uganda, shyness among teenagers was one of the reasons cited for late booking (Kawungezi, 2015:139). Older age was associated with less postnatal utilisation in Rwanda in a study conducted by Rwabufigiri et al. (2016:3). The reason could be attributed to confidence with experience gained from previous pregnancies.

3.3. Social support system related barriers

Barriers related to social support in this study (Theme 3) is reflected in the categories lack of spousal support, resistance to test for HIV as well as socio economic factors and poverty. Literature review on the social support of women (Theme 3) for antenatal care utilization found that men view maternal issues as women problems hence are not actively present in health matters.

Question: What are the social support system problems faced by pregnant women?

3.3.1. Spousal support barriers

Participants reported that poor use of ANC services was caused by absence of the husband, his lack of interest in pregnancy issues, or being uncaring. Some husbands are also reluctant to undergo HIV testing.

3.3.1.1. Lack of spousal support and involvement. Findings revealed that some men are working in other countries and the women will be waiting for their permission to attend ANC as mentioned by maternal healthcare provider.

MHCP 7: 'Some husbands are working in South Africa or elsewhere and are not at home. There are some women who say, I was waiting for my husband to come so that I can come and book.'

These findings are consistent with those from North-Central Nigeria (Al-Mujtaba et al., 2016:4) where women also cited absence of partners to accompany their wives to hospital as a barrier to utilisation of maternal healthcare services.

Spouse not caring and lacking interest emerged in this study as the reason men do not support their pregnant women.

CM 7: 'Most men do not care for their wives when they are pregnant. They think that when their wives are pregnant it is the responsibility of their mothers and birth attendants.'

These findings were corroborated by Ngomane and Mulaudzi (2012:3) who indicated that mother in-laws in the Bohlabelo district in Limpopo, South Africa accompanied their daughter in-laws to hospital to give birth because their sons leave the responsibility to their mothers.

3.3.1.2. Spousal reluctance for HIV testing. Question: Why do pregnant women refuse to be tested for HIV?

Because women are encouraged to be tested for HIV during pregnancy, fear of rejection after receiving positive HIV results cause some women not to attend ANC services at all. The participants explained.

PNW 2: 'Men refuse to be tested. Sometimes a woman is tested and the results are negative, the husband refuses to be tested saying your results are also mine.

MHCP 3: 'If he gets tested, he may be told that he is positive. Sometimes the husband will reject her. Your way of living completely changes. That is why women delay in coming to book.'

Nyondo, Chimwaza and Muula (2014:9) conducted a study in Malawi and participants reported that lack of male involvement causes non-disclosure of HIV test results between partners and ultimately affecting compliance with adherence to ART. In rural Tanzania, August, Pembe, Kayombo, Mbekenga, Axemo and Darj (2015:4) reported that participants cited fear of HIV testing for partners during the ANC as the reason they did not come for ANC. In the same study, participants reported that for HIV test to be done, women were asked to bring along their partners and because their partners refused the women would not attend ANC.

3.3.2. Socio-economic barriers

Lack of money to buy food and baby preparation emerged as barrier to utilisation of health facilities especially the mothers waiting home.

3.3.2.1. Poverty. Women were ashamed to be seen by other women without food or better items at the mothers' waiting home and they would not come at all or would run away. Village health workers had this to say with regards to women who did not have money to buy food:

MHCP 2: 'The husband has no means of getting money. So, for her to come here early, she will be ashamed to come and see others who will be eating better food while she does not have. So, she may prefer staying at home and come when she is delivering.'

MHCP 4: Sometimes women do not have enough preparation items for the baby and they are shy to be seen by other women with nothing.'

Financial problems were also noted as a barrier to utilisation of maternal health care services in Eastern Cape in South Africa by Tsawe and Susuman (2014:9) and Alabi et al. (2015:4) and in Bangladesh, Cambodia, Cameroon, Nepal, Peru, Senegaland Uganda (Saad–Haddad et al., 2016:7).

3.4. Belief system related barriers

In terms of belief systems, (Theme 4) the findings in this study showed that pregnant women rely on cultural / and religious beliefs.

Question: What do you think are cultural barriers to attending antenatal care?

3.4.1. Cultural barriers

Cultural barriers revealed in this study were sub-categorised into traditional beliefs, traditional practices and traditional preferences.

3.4.1.1. Traditional beliefs. One cultural belief that prevent women from booking for ANC is a belief that revealing the pregnancy at an early stage might lead to abortion.

MHCP 7: 'Some women hide their pregnancy. They believe that if the pregnancy is known early, one will abort or the child will be taken from the womb.'

 PNW 4: 'When a woman in this area gets pregnant she only tells her husband and no one else.'

Some women also refrain from moving around while pregnant for the fear of stepping on mysterious traps on their way.

CM 3 and MHCP 7: 'In our culture we say when you are walking in the roads while pregnant you will step on traps [mumvurewa] intended to cause harm. Pregnant women are told to stay at home and not to move around.'

The findings in this study are consistent to those found in Zambia where fear of disclosing one's pregnancy early was the reason why women booked late (Chama-Chiliba and Koch, 2013:81). In a study conducted in Malawi by Zamawe, Masache and Dube (2015:590), participants reported that women did not disclose their pregnancies early because some jealous people can hurt pregnant women by closing the birth canal, so that they are not able to give birth normally when their time is due and as a result they die of maternal complications. Hiding of pregnancy from friends and strangers during the first few months was also confirmed by Ngomane and Mulaudzi (2012:4) in a study conducted in South Africa.

3.4.1.2. Traditional practices. Question: What traditional practices prevent pregnant women from using ANC?

Some women are reluctant to go to the hospital or clinic and prefer to use herbs during pregnancy, especially when they believe that they may be bewitched. A participant explained this practice in detail.

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

The practice of using herbal medication in pregnancy was also reported in Saudi Arabia (Al-Ghamdi, Aldossari, Al-Zahrani, Al-Shaalan, Al-Sharif, Al-Khurayji & Al-Swayeh, 2017:4) and because doctors were indifferent to the practice, this could have influenced utilisation of healthcare services.

3.4.1.3. Traditional preferences. **Question:** What help do elderly women in the community offer pregnant women?

One of the participants reported that elderly women in the community were preferred by women because they provided them with herbs.

PNW 1: 'Other women prefer the elderly women in the community because they give them herbs to open the birth canal (mushonga wemasuwo).'

Use of herbs by pregnant women to widen the birth canal was also reported in a study done by Mureyi, Monera and Maponga (2012:1) in urban Harare, Zimbabwe. The findings in this study point to a need for clear policy guidelines on the integration of biomedical medicine and herbal medicine in maternal health.

3.4.2. Religious barriers

Religious related barriers revealed in this study were spiritual beliefs and spiritual practices (Table 2).

Question: What are the religious barriers to attending antenatal care?

Barriers related to religion that influence use of ANC services include the belief in the healing powers of the church and services offered by the elderly church women.

3.4.2.1. Spiritual beliefs. Participants reported that prophets do not allow anyone to seek healthcare services or use other healing interventions.

CM 6: 'The prophets that assist us at the shrines [masowe] say the prayer [munamato] should not be mixed up with anything else.'

Consistent with these findings, CCORE, UNICEF. & M-consultating Group (2011:33)'s study also found that some apostolic groups in Zimbabwe stressed on faith healing and complete adherence to the church doctrine, practices and regulations hindering utilisation of healthcare services.

3.4.2.2. Spiritual practices. The study highlighted faith and confidence in the healing practices as some of the barriers in seeking ANC.

MHCP 7: 'Those from the Johane Marange apostolic go to their church for the pregnancy to be stabilised [tsigiswa]. They are attended to by the church elderly women at the church tents.'

A participant revealed that the church trusts the use of water or objects prayed for from the shrine.

PNW 3: 'We use water or objects prayed for at the shrine. Prayer helps in that, if the baby was not moving, it will turn. If you drink the water that has been prayed for, you can give birth without any problems.'

The findings in this study are consistent with findings from a study done in Zimbabwe by CCORE, UNICEF. & M-consulting Group (2011:33), where members of the ultra-conservative apostolic sects confirm that women are not allowed to utilise maternal healthcare services in health facilities, instead, their pregnancies are monitored and delivered by elderly church women in 'makeshift maternal clinics' or at home.

The four themes and nine categories derived from this study (see Table 2) are generic and universal aspects that could be transferable to other settings. The subcategories are lived experiences of the respondents and are as such contextual and need contextual solutions unique to a particular setting. The findings that are specific for this health setting are recommended to be addressed for improvement of antenatal care utilisation.

4. Discussion

Officially, the healthcare system in Zimbabwe follows the WHO (2016)'s recommendation of initiating ANC within the first twelve weeks of pregnancy and attending at least eight contact visits during an uncomplicated pregnancy. In this study, barriers to using antenatal care in rural Zimbabwe evolved around maternal healthcare system, maternal healthcare user, social support system and belief systems factors. Women who seek healthcare services need to feel comfortable doing so. Not being treated with respect and long waiting times are deterrents for women who sometimes go out of their way to access healthcare. In Zimbabwe, maternity care at public health facilities is free. However, women in this study did not perceive maternal healthcare to be free because they pay out of their pocket for various healthcare related services. Furthermore, women are expected to provide their own food when they use maternity waiting facilities. The government needs to make sure that basic resources and services are available at health facilities, to ensure every woman regardless of socio-economic status has access to basic care. After all provision of health care is a basic right. The study revealed that because of presence of male midwife, some pregnant women were apprehensive and reluctant to seek maternal healthcare services in case the male midwife would ask them to undress and examine them. These findings concur with Okeshola and Sadiq (2013:79) and Kim, Kim and Sohn (2017:227) in studies done in Nigeria and South Korea respectively where women were reluctant to deliver at a health facility because they did not want to undress in front of any man other than their husbands for cultural reasons. Policy makers need to consider women's views and preferences and deploy only female health personnel in areas where traditions and culture dictate everyday norms and values.

In this study, some women's educational levels were low and did not know the importance of regular ANC visits and could not read the review dates which negatively affected uptake. The findings support the notion that women with low levels of education do not utilise maternal healthcare services. These findings are consistent with studies from South Africa (Tsawe & Susuman, 2014) and Malawi (Zamawe et al, 2015) were lack of knowledge was cited as the reason women did not utilise available healthcare services. In Zimbabwe, and especially in the Mhondoro-Ngezi district, there is an urgent need to disseminate information relating to the purpose and importance of scheduled visits to women of childbearing age. Unawareness of the importance of HIV testing may also be the reason why women fear HIV testing which was a barrier to the use of ANC services in this study. Women who are unaware of their HIV status and do not attend ANC are unlikely to access prevention of mother to child transmission (PMTCT) and HIV services thus may transmit HIV to their children. Healthcare providers also mentioned that women were deterred from using healthcare services because they were shy and embarrassed about unplanned pregnancy, revealing a need for interventions focussing on provision of family planning services to prevent unwanted pregnancies.

Women in developing countries sometimes fail to use ANC services due to other responsibilities. Studies conducted in Sudan (Wilunda et al, 2017:5) and Zambia (Sialubanje, et al, 2015:8) on utilisation of maternal healthcare services revealed that domestic chores, planting, weeding, harvesting and a need to take care of children at home prevent some women from seeking maternal healthcare services. To ensure accessibility to maternal healthcare services, policy makers should initiate and scale-up home visits and outreach programs to ensure services are available whenever they are needed. Healthcare workers mentioned that sometimes pregnant women were simply lazy, procrastinated in seeking medical attention and had a know-it-all attitude. The attitudes of the women that are reported in this study provide a foundation for future initiatives targeted at addressing the attitudes. One such strategy would be to highlight how the negative attitudes lead to poor health outcomes for the mother and the baby if they are not changed.

Because health personnel advocated for partner HIV testing during

pregnancy to ensure positive pregnancy outcome, some husbands/ partners reportedly refused to accompany their wives to health facility for fear of being tested and used their wives' results as a proxy to their own. Fear of rejection by their husbands after receiving positive HIV results reportedly cause some women not to come to the hospital. The study revealed that although there were some men who were interested in accompanying their wives to hospital, the long waiting time spent before service is rendered deter them. Health providers need to overcome existing perceptions by educating husbands on the importance of supporting pregnant women in accessing ANC.

In this study, pregnant women relied on traditional, community and religious elders for care during pregnancy. Participants stated that elderly community and religious women give pregnant women herbs and holy water or objects respectively in preparation for safe delivery, therefore women reason that there is no need to seek health services at a health facility. The World Health Organization (2015) comments that culture is not static, hence culture dynamics need to be incorporated into maternity care services, to ensure culture sensitive services. Based on these findings, further research with more refined designs such as case control studies should be undertaken to ascertain the active properties in these herbs with the purpose of integrating indigenous knowledge with modern medicine.

5. Limitations and strengths of the study

The study would have benefited from traditional birth attendants' experiences on childbirth. Their experiences could form a new body of knowledge, that would be used to improve maternal health. Unfortunately, the researchers failed to recruit traditional birth attendants since their practices are prohibited by national policy. By participating in the study, the traditional birth attendants would have had an opportunity to clear myths and misconceptions associated with their practice. Despite the mentioned limitation the findings of the study remain significant. The strength of the study is that barriers were explored from different maternal stakeholders' perspectives.

6. Conclusion

This qualitative study identified four themes, nine categories and nineteen sub-categories that influence the antenatal care utilisation in a particular setting. This highlights the barriers that affect women's use of ANC in a rural district in Zimbabwe as being multifaceted. Therefore, to promote ANC utilization the study recommends a multisectoral approach. Among other strategies to address the barriers, the study recommends strengthening of health information dissemination among women of childbearing age on the benefits of attending recommended ANC visits, conducting ongoing workshops, and in-service training for midwives to improve quality of care and intensifying community outreach programs to increase access to maternal healthcare services. Healthcare practitioners should acknowledge the role played by women's preferences such as, opinions, feelings, social, culture, religious and practices and find ways to incorporate these aspects as part of holistic ANC provision.

Ethical statement

Ethical clearance was granted by the Ethics Committee of the Faculty of Health Sciences, University of Pretoria (Ethical number 181/2016), the Medical Research Council of Zimbabwe (Approval number MRCZ/ A/2095), the Zimbabwe Ministry of Health and Child Care and community leaders. Informed consent forms were signed by the participants to indicate their willingness to participate in the study.

Funding

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgement

The authors would like to acknowledge the assistance of Ms Verna Rumano for her assistance in taking field notes for the focus groups.

References

- Alabi, A., O'Mahony, D., Wright, G. & Ntsaba, M.J. (2015). Why are babies born before arrival at health facilities in King Sabata Dalindyebo Local Municipality, Eastern Cape, South Africa? A qualitative study. African Journal of Primary Health Care Family Medicine 2015, 7: 1;1-9.
- Al-Ghamdi, S., Aldossari, K., Al-Zahrani, J., Al-Shaalan, F., Al-Sharif, S., Al-Khurayji, H., & Al-Swayeh, A. (2017). Prevalence, knowledge and attitudes toward herbal medication use by Saudi women in the central region during pregnancy, during labour and after delivery. *BMC Complementary and Alternative Medicine*, 17(196), 1–9.
- Al-Mujtaba, M., Cornelius, L.J., Galadancia, H., Erekaha, S., Okundaye, J.N., Adeyemi, O. A. & Sam-Agudu, N.A. (2016). Evaluating Religious Influences on the Utilization of Maternal Health Services among Muslim and Christian Women in North-Central Nigeria. Hindawi Publishing Corporation BioMed Research International 2016;1-9. Article ID 3645415, https://doi.org/10.1155/2016/3645415. Accessed 16/04/18.
- August, F., Pembe, A.B., Kayombo, E., Mbekenga, E.C., Axemo, P. & Darj, E. (2015). Birth preparedness and complication readiness a qualitative study among community members in rural Tanzania. Global Health Action 2015, 8;1-12. 26922. doi: 10.3402/gha.v8.26922.
- Austin, A., Gutema, H., Belizama, M., Colaci, D.S., Kendall, T., Tebeka, M., Hailemariam, M., Bekele, D., Tadesse, L., Berhane, Y. & Langer, A. (2015). Barriers to providing emergency obstetric care in Addis Ababa, Ethiopia: Healthcare providers' perspectives on training, referrals and supervision, a mixed methods study. BMC Pregnancy and Childbirth 2015, 15:74;1-10.
- Bhattacherjee, A. (2012). Social Science Research: Principles, Methods, and Practices. Textbooks Collection 3. University of South Florida, Florida: Scholar Commons.
- Bhattacherjee, S., Datta, S., Saha, J., & Chakraborty, M. (2013). Maternal health care services utilization in tea gardens of Darjeeling, India. *Journal of Basic and Clinical Reproductive Sciences*, 2(2), 77–84.
- CCORE, UNICEF. & M-consultating Group. (2011). Apostolic Religion, Health and Utilization of Maternal and Child Health Services in Zimbabwe.
- Chama-Chiliba, C. M., & Koch, S. F. (2013). Utilization of focused antenatal care in Zambia: Examining individual- and community-level factors using a multilevel analysis. *Health Policy and Planning*, 2015(30), 78–87.
- Chauvet, G. (2015). Coupling methods for multistage sampling. The Annals of Statistics, 43(6), 2482–2506.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Merrill Prentice Hall.
- Dutamo, Z., Assefa, N., & Egata, G. (2015). Maternal health care use among married women in Hossaina, Ethiopia. BMC Health Services Research, 15, 365.
- Evangeli, M., Pady, K., & Wroe, A. L. (2015). Which psychological factors are related to HIV testing? A quantitative systematic review of global studies. *AIDS Behaviour*, 2016(20), 880–918.
- Ganle, J. K., Parker, M., Fitzpatrick, R., & Otupiri, E. (2014). A qualitative study of health system barriers to accessibility and utilization of maternal and newborn healthcare services in Ghana after user-fee abolition. *BMC Pregnancy Childbirth*, 14, 425.
- Gore, O. T., Muza, C., & Mukanangana, F. (2014). Barriers and motivators to early utilization of antenatal care services in Chipinge District in Zimbabwe: A qualitative study. *Global Journal of Biology, Agriculture & Health Sciences, 3*(4), 116–121.
- Gourlay, A., Birdthistle, I., Mburu, G., Iorpenda, K., & Wringe, A. (2013). Barriers and facilitating factors to the uptake of antiretroviral drugs for prevention of mother-tochild transmission of HIV in sub-Saharan Africa: A systematic review. *Journal of the International AIDS Society*, 16(1), 18588. https://doi.org/10.7448/IAS.16.1.18588.
- ICM (2010). Global standards for midwifery education. ICM Strengthening midwifery globally. https://www.internationalmidwives.org.
- Kawungezi, P. C., AkiiBua, D., Aleni, C., Chitayi, M., Niwaha, A., Kazibwe, A., et al. (2015). Attendance and Utilization of Antenatal Care (ANC) services: Multi-center study in upcountry areas of Uganda. *Open Journal of Preventive Medicine*, 05(03), 132–142.
- Khan, C. & Chovanec, D.M. (2010). Is PAR relevant in the Canadian workplace? Journal of contemporary Issues in education, 2010, 5 :1;34-44.
- Kim, I.-J., Kim, S.-H., & Sohn, S.-K. (2017). Societal perceptions of male nurses in South Korea: A Q-methodological study. *Japan Journal of Nursing Science*, 14(3), 219–230.
 Kululanga, L. I., Malata, A., Chirwa, E., & Sundby, J. (2012). Malawian fathers' views
- Kululanga, L. I., Malata, A., Chirwa, E., & Sundby, J. (2012). Malawian fathers' views and experiences of attending the birth of their children: A qualitative study. BMC Preenancy and Childbirth, 12, 141.
- Mandoreba, T., & Mokwena, K. (2016). Factors associated with late antenatal booking in Harare. PULA: Botswana Journal of African Studies, 30, 131–138.

No funding was received for this work.

J. Mutowo et al.

- Mannava, P., Durrant, K., Fisher, J., Chersich, M., & Luchters, S. (2015). Attitudes and behaviours of maternal health care providers in interactions with clients: A systematic review. *Global Health*, 11, 36.
- Mason, L, Dellicour., S, Kuile., F.T, Ouma., P, Were., F, Laserson., K & Desai., M. (2015). Barriers and facilitators to antenatal and delivery care in western Kenya: a qualitative study. BMC Pregnancy and Childbirth, 15:26;1-10.
- Moller, A. B., Petzold, M., Chou, D., & Say, L. (2017). Early antenatal care visit: A systematic analysis of regional and global levels and trends of coverage from 1990 to 2013. *Lancet Global Health*, 5(10), e977–e983.
- Morgan, D. L. (2013). Focus group as qualitative research: Planning and research design for focus groups. SAGE Resrach Methods.
- Mselle, L. T., Moland, K. M., Mvungi, A., Evjen- Olsen, B., & Kohi, T. W. (2013). Why give birth in health facility? Users' and providers' accounts of poor quality of birth care in Tanzinia. BMC Health Services Research, 13(174), 1–12.
- Mureyi, D. D., Monera, T. G., & Maponga, C. C. (2012). Prevalence and patterns of prenatal use of traditional medicine among women at selected Harare clinics: A cross-sectional study. *Bio Medical Central*, *12*(164), 1–8.
- Ngomane, S., & Mulaudzi, F. M. (2012). Indigenous beliefs and practices that influence the delayed attendance of antenatal clinics by women in the Bohlabelo districts in Limpopo. South Africa Midwifery, 28(1), 30–38.
- Nketiah-Amponsah, E., Senadza, B., & Arthur, E. (2013). Determinants of utilization of antenatal care services in developing countries: Recent evidence from Ghana. African Journal of Economic and Management Studies, 4(1), 58–73.
- Nyathi, L., Tugli, A. K., Tshitangano, T. G., & Mpofu, M. (2017). Investigating the accessibility factors that influence antenatal care services utilisation in Mangwe district, Zimbabwe. African Journal of Primary Health Care and Family Medicine, 9(1), 1–5.
- Nyondo, A. L., Chimwaza, A. F. & Muula, A. S. (2014). Exploring the relevance of male involvement in the prevention of mother to child transmission of HIV services in Blantyre, Malawi. BMC International Health and Human Rights 2014, 14:30;1-12.
- Okeshola, F. B., & Sadiq, I. T. (2013). Determinants of home delivery among Hausa in Kadun South Local Government Area of Kaduna State, Nigeria. American International Journal of Contemporary Research, 3(5), 78–85.
- Okonofua, F., Ogu, R., Agholor, K., Okike, O., Abdus-salam, R., Gana, M., et al. (2017). Qualitative assessment of women's satisfaction with maternal health care in referral hospitals in Nigeria. *Reproductive Health*, 14(1). https://doi.org/10.1186/s12978-017-0305-6.

- Rwabufigiri, B. N., Mukamurigo, J., Thomson, D. R., Hedt- Gautier, B. L., & Semasaka, J. P. S. (2016). Factors associated with postnatal utilisation in Rwanda: A secondary analysis of 2010 Demographic and Health Survey data. *BMC Pregnancy* and Childbirth, 16(122), 1–8.
- Saad- Haddad, G., DeJong, J., Terren, N., Restrepo-Mendez, M.C., Perin, J., Vaz, L., Holly, N., Amouzou, A., Barros, A.J.D. & Bryce, J. (2016). Patterns and determinants of antenatal care utilization: analysis of national survey data in seven countdown countries. Journal of Global Health, 6:1;1-20.
- Sialubanje, C., Massar, K., Hamer, D. H., & Ruiter, R. A. (2015). Reasons for home delivery and use of traditional birth attendants in rural Zambia: A qualitative study. BMC Pregnancy Childbirth, 15, 216.
- Titaley, C. R., Hunter, C. L., Dibley, M. J., & Heywood, P. (2010). Why do women still prefer traditional birth attendants and home delivery? A qualitative study on delivery care services in West Java Province. *Indonesia. BMC Pregnancy and Childbirth*, 10(43), 1–14.
- Tsawe, M., & Susuman, A. S. (2014). Determinants of access to and use of maternal health care services in the Eastern Cape, South Africa: A quantitative and qualitative investigation. BMC Research Notes, 7.
- United Nations Children's Fund. (2018). Antenatal care. Retrieved from https://data. unicef.org/topic/maternal-health/antenatal-care/ on the 8 June 2019.
- Wilunda, C., Scanagatta, C., Putoto, G., Montalbetti, F., Segafreda, G., Takahashi, R., et al. (2017). Barriers to utilisation of antenatal care services in South Sudan: A qualitative study in Rumbek North County. *Reproductive Health*, 14(1). https://doi. org/10.1186/s12978-017-0327-0.

World Health Organization (2015). WHO Recommendation on Health Promotion Interventions for Maternal and Newborn Health. Geneva, Switzerland: WHO; 2015.

- World Health Organization. (2016). WHO Recommendations on antenatal care for a positive pregnancy experience. Geneva: World Health Organisation.
- Zamawe, C., Banda, M., & Dube, A. (2015). The effect of mass media campaign on Men's participation in maternal health: A cross-sectional study in Malawi. Reproductive Health, 12, 31. doi: 10.1186/s12978-015-0020-0. Zimbabwe National Statistics Agency., European Commission., UNDP., UNICEF & MCHIP. (2012). Multiple Indicator Cluster Survey Final Report. Harare. UNICEF.
- Zimbabwe National Statistics Agency. & ICF International. (2016). Zimbabwe Demographic and Health Survey 2015 Final Report. USA. Rockville Maryland.