THE UNIVERSITY OF ZAMBIA
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WOMEN'S PERCEPTIONS OF LATE ANTENATAL BOOKING IN LUSAKA PROVINCE, ZAMBIA

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A dissertation submitted to the University of Zambia in partial fulfilment of the requirements of the Degree of Master of Science in Midwifery, Women and Child Health

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DECLARATION

I, Masozi Victoria Nkunika Bweupe, hereby do declare that the work on which this dissertation is based is my original work and neither the whole work nor any part of it has been, or is being, or is to be submitted for another Degree at the University of Zambia or another.

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CERTIFICATE OF APPROVAL

The University of Zambia approves this dissertation titled Women's Perceptions of Late Antenatal Booking in Lusaka province, Zambia, in partial fulfilment of the requirements for the award of the Degree of Master of Science in Midwifery, Women and Child Health

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ABSTRACT

Background: Antenatal care provided by skilled health care professionals such as midwives is one of the three pillars of maternity care aimed at reducing maternal and perinatal morbidity and mortality. In order to maximise the benefits of this pillar, pregnant women are required to book before 12 weeks gestation. However, statistics from Lusaka province continue showing that pregnant women book late.

Aim: The aim of this study was to explore the perceptions of women in Lusaka province towards late antenatal booking.

Methods: The study was carried out using a descriptive cross-sectional qualitative design. Purposive sampling was utilised to select the study participants and the settings. Nineteen pregnant women with diverse gravidity from both rural and urban areas of Lusaka province were recruited from three health facilities. Data were tape-recorded and collected through indepth interviews using a semi-structured interview guide. The data were analysed using content analysis following Collaizzi's seven steps of analysis.

Findings: Two major themes namely; 'Unaware of the concept of late antenatal care (ANC) booking' and 'Perceived barriers to timely ANC booking' emerged from the data. The first major theme was informed by two subthemes namely; Unsure of ideal ANC booking time; Women's decision making on timely ANC booking. The second major theme was informed by five subthemes; 'The need to come with spouse/partner'; 'Fear of getting tested for illnesses'; 'Attached monetary cost to ANC booking'; 'Stigma attached to single parenthood'; and 'Amenorrhoea due to contraceptive use'.

Conclusion: The participants' perceptions towards ANC booking, though late, were influenced by the benefits of attending ANC as well as socio-cultural trends related to pregnancy. Nonetheless, they did not downplay the fundamental impact of the ANC programme, which is meant to safeguard the wellbeing of their health and that of their unborn babies. It is therefore, recommended that in order to enhance positive birth outcomes, the timing for booking should be one of the care strategies that should be strengthened in the provision of ANC.

Key words: *Women, perceptions, antenatal booking, antenatal care, pregnancy, midwives, nurses.*

DEDICATIONS

To

My beloved mother Ms Julia Ndindisa Nkunika (deceased) whose efforts of my upbringing have borne the best fruit and her presence still being felt

To

My loving husband Dr Maximillian Bweupe for his unwavering support, his belief in me and the sleepless nights I have caused you

To

My lovely children Dr Maureen Ndindisa Chimfwembe, Mwila Mwansa Bweupe, Mapalo Mkhuzo Mulenga Bweupe and Ungweru Mbamwabi Mubanga Bweupe for being appreciative, patient and supportive

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LIST OF TABLES

TABLE OF CONTENTS

CHAPTER FIVE: DISCUSSION OF FINDINGS

LIST OF ACRONYMS

AIDS…….. Acquired Immunodeficiency Syndrome

ANC…….. Antenatal Care

BMC……. Biomedical Central

CBVs…… Community Based Volunteers

COCs…… Combined Oral Contraceptives

CPD…….. Continuous Professional Development

CSO……. Central Statistical Office

DHO…… District Health Office

EMTCT…….. Elimination of Mother to Child Transmission of HIV/AIDS

FANC……. Focused Antenatal Care

FP……... Family Planning

GA……. Gestational Age

Hb…….. Haemoglobin

HBM……. Health Belief Model

HIV…… Human immunodeficiency Virus

HMIS…… Health Management Information System

IPT…… Intermittent Presumptive Treatment

LAHC …….. Long Acting Hormonal Contraceptive

LDHD…… Lusaka District Health District

LPHO…… Lusaka Provincial Health Office

MCH……... Maternal and Child Health

MDSR……. Maternal Death Surveillance Response

MSB…… Macerated Still Birth

NHRAC…….. National Health Research Authority Council

PHD…… Provincial Health Director

PPH…… Postpartum Haemorrhage

RCT…… Randomised Controlled Trial

SDGs……... Sustainable Development Goals

TB…… Tuberculosis

TBA……. Traditional Birth Attendant

TDRC…….. Tropical Diseases Research Centre

TT…… Tetanus Toxoid

UNZA…….. University of Zambia

UNZABREC…… University of Zambia Biomedical Research Ethics Committee

VCT…… Voluntary Counselling and Testing

WHO…….. World Health Organisation

ZDHS…….. Zambia Demographic and Health Survey

CHAPTER ONE: INTRODUCTION

1.0 Background Information

According to the World Health Organisation (WHO), antenatal care (ANC) is the care provided by skilled health care professionals to pregnant women and adolescent girls in order to ensure the best conditions for both mother and the baby during pregnancy, thus ensuring a positive pregnancy experience (WHO, 2016). Antenatal care is aimed at reducing maternal and perinatal morbidity and mortality, both directly through detection and treatment of pregnancy related complications and indirectly through the identification of women and girls at increased risk of developing complications during labour and delivery (WHO, 2019). Consequently, with quality ANC services, women could be encouraged to seek care at childbirth as they would have learnt through the midwives the need to having a safe delivery (WHO, 2019). Quality ANC could also reduce still births, childbirth complications and newborn deaths, as well as help women get care and counselling for Human Immuno-virus (HIV)/Acquired Immuno Deficiency Syndrome (AIDS), malaria, tuberculosis (TB), and other conditions. Accordingly, the earlier ANC services are sought, the more pregnant women will maximise on these opportunities (WHO, 2019; 2016).

This chapter introduces what the study focused on by presenting the background information, statement of the problem, factors contributing to late ANC booking described under the following headings; cultural factors, service related factors, socio-economic factors and geographical factors. The chapter also presents the purpose of the study, the justification of the study, the research question, research objectives, which include general objectives and specific objectives, and also presents the conceptual and operational definitions of some terms related to the phenomenon being studied.

The WHO (2016) recommends that the first antenatal booking should occur in the first trimester or preferably within 12 weeks of pregnancy, and acknowledges the fact that ANC programmes recommended for developing countries have not been subjected to rigorous scientific evaluation to determine their effectiveness; they have been made along the lines of those used in developed countries. Thus, the lack of rigorous scientific evaluation could have impeded the identification of effective interventions such as the correct timing for booking and optimal allocation of resources (WHO, 2002). For ANC to be meaningful, it is recommended that it is sought early in

pregnancy, as it is more helpful for the skilled attendant to identify and prevent adverse pregnancy outcomes. However, late booking is still a major problem globally (Haddrill et al., 2014).

Antenatal care provided by skilled healthcare professionals to women is known to offer important motherhood interventions that are expected to significantly reduce maternal and perinatal morbidity and mortality (WHO, 2016; Jallow et al., 2012). Before 2007, Zambia followed the traditional approach of providing ANC, which recommended 12 visits, with the first visit taking place during the first trimester; before 16 weeks of pregnancy (Central Statistical Office [CSO], Ministry of Health [MoH], Tropical Diseases Research Centre [TDRC], University of Zambia [UNZA] and Macro International Inc., 2009). In 2007, the WHO (2007) introduced the Focused Antenatal Care (FANC) model; an approach that recommended that a pregnant woman without complications should only have four ANC visits; with the first visit taking place before 12 weeks of gestation. This was different from the traditional approach, which advised booking before 16 weeks. Although the FANC model recommended four visits, it emphasised that women who experienced discomfort, danger signs or had special needs or conditions beyond the scope of basic midwifery care were to have additional visits (CSO et al., 2009). Thus, apart from providing basic care, the FANC model stressed that every pregnant woman should be monitored for complications. It emphasised the principle that every pregnancy was at risk of complications, and hence segregated pregnant women between those eligible to receive routine ANC (the basic component) and those who needed specialised care for specific health conditions or risk factors (Forster et al., 2016). In addition, the FANC approach was said to be a maternal and neonatal health programme that emphasised quality of care during ANC over the quantity of visits. Evidence showed that the FANC model was often poorly implemented in developing countries and clinical visits were said to be irregular with long waiting times and poor feedback given to the women (Haddrill et al.,2014; WHO, 2002).

Another key strategy of FANC was that each ANC visit was to be conducted by a skilled health care provider, which was to be continued through to delivery (WHO, 2007). Antenatal care by a skilled health care provider is important in order to monitor pregnancy and reduce the risk of morbidity and mortality for both the mother and her baby during pregnancy and delivery. It follows that quality of ANC can be monitored through the services received and the kind of information mothers are given during their visit. The content of ANC is therefore an essential

component of ANC quality service. Ensuring that pregnant women receive information and undergo screening for complications should be a routine part of all ANC visits provided the first visit occurs within 12 weeks of pregnancy (CSO et al., 2009). Hence, there is need for all pregnant women to time ANC booking within the first trimester of pregnancy in order to maximise on the interventions. With these interventions provided for in the FANC model, it was expected that women who knew about risk factors in pregnancy and childbirth were more likely to book for ANC within the stipulated 12 weeks, and utilised health facilities for delivery than those without knowledge. Although ANC booking within the first 12 to 16 weeks of pregnancy is recommended in most low income countries' guidelines, this has not translated into practice as late booking remains the trend in most sub-Saharan African countries (Muhwava et al., 2016; WHO, 2016). According to CSO et al., (2009), women booking before 14 weeks averaged at 19% for both rural and urban areas of Zambia.

In 2017, Zambia began introducing a new ANC model; replacing the FANC model. The new ANC model was launched in Rwanda, Kigali (WHO, 2016). The model recommends a minimum of eight ANC contacts; focuses on positive pregnancy experience; and timing of first ANC contact within 12 weeks of gestation (WHO, 2016). The ultimate goal for the model is to improve quality of ANC, maternal, foetal and newborn outcomes. The new model uses the term 'contact' as opposed to 'visit', which is used in FANC, because contact implies an active connection between a pregnant woman and a health care provider (WHO, 2016). This model is not prescriptive but rather all interventions are based on individual needs of a woman in combination with implementation of effective clinical practices, hence the emphasis on contacts as opposed to visits (Muhwava et al., 2016; WHO, 2016; Haddrill et al., 2014; Kisuule et al., 2013; WHO, 2012; Gross et al., 2012). The new paradigm also encourages pregnant women to book early for ANC as it aims at eliminating mother to child transmission (eMTCT) of HIV by allowing women to receive HIV Testing Services during the first trimester, and treatment instituted immediately if found positive. This strategy complements government's prioritised policy on health promotion of preventing transmission of disease. Not only are HIV Testing Services advantageous to the mother who is made aware of her HIV status, it also allows for the protection of her unborn child. The Government of the Republic of Zambia (GRZ) has introduced point of care testing using rapid diagnostic testing kits for both syphilis and HIV/AIDS in order to detect the diseases early and treatment instituted as early as possible.

Detection and treatment of syphilis as well as detection of HIV in the first trimester of pregnancy helps rescue unborn infants who are exposed.

While the Zambia Demographic Health Survey (ZDHS) 2013-2014 statistics show that 96% of pregnant women attend ANC services at least once during pregnancy (CSO et al., 2015), only 24% book during the first trimester (MoH, 2017). This means that 66% of pregnant women book late. Thus, majority of pregnant women attending ANC in Zambia are predisposed to first trimester preventable complications as well as treatable infections. Similarly, the Lusaka Provincial Health Office (LPHO) (2015) indicators regarding timing of first ANC visit show that only 8-11% of pregnant women in the province book before or at 14 weeks gestation, against the expected coverage of 90% in both the urban and rural parts of the province. In the Lusaka District Final Score Card, the five high volume health facilities recorded ANC booking within 14 weeks of a coverage that ranged between 4% and 13% (LPHO, 2017). This is a cause for concern. This information is consistent and is supported by the ZDHS 2007 and 2013-2014 reports, which state that approximately 2.1% and 1.4% respectively, of women were attending ANC in the first trimester countrywide (CSO et al., 2014; CSO et al., 2009).

Early antenatal booking at 14 weeks of pregnancy in Zambia is government policy due to the perceived better outcomes of pregnancy. This is important because early antenatal booking enables a woman to undergo important tests such as HIV and rapid syphilis testing. However, a closer analysis of the guidelines relating to timing of the first ANC visit reveals some disparities in the visits. The LPHO (2015) through their Performance Assessments (PA) document places booking at 14 weeks pregnancy. The ZDHS 2007 and 2013 - 2014 on the other hand state that the first ANC visit should occur by the end of 16 weeks of pregnancy (CSO et al., 2014; CSO et al., 2009). This lack of preciseness in ANC booking timing could have led to midwives providing conflicting information, thus leading to confusion among the recipients of ANC. The LPHO (2015) notes high numbers of macerated still births (MSB) owing to poorly treated or untreated infection of maternal syphilis in the province. Maternal syphilis is a disease that is easily treated and if detected in the first trimester of pregnancy, a number of complications such as MSB can be avoided.

Late ANC booking could also explain the increase and slow progress in improving child survival. For this reason, a comprehensive understanding into delayed access to ANC, also

referred to as late antenatal booking with particular attention to eliciting women's perceptions, is very important because it is linked to increased maternal and foetal morbidity and mortality (Haddrill et al., 2014). More work is required to raise the number of women who book for ANC within 12 weeks gestation from the existing 24% to at least 75% if the war of reducing maternal deaths, improving maternal health and child survival in the country is to be won (MoH, 2017). Women's voices need to be heard (Kwaleyela et al., 2019; MoH, 2017; WHO, 2016) in order to have tangible improvements in the provision of maternity care. In a related matter, the findings of the ZDHS 2013 – 2014 show that 56% of low risk pregnant women make four or more ANC visits during their pregnancy (CSO et al., 2014). Apart from revealing that majority (56%) of pregnant women in Zambia do not experience discomfort and thus, do not require to be attended to by an obstetrician, such revelations provide evidence as to why MoH should invest in training more midwives, whose scope of practice among others is to advise women on the importance of booking for ANC during a specified period.

It is important for pregnant women to initiate ANC attendance early in order for health care providers to gather reliable baseline data, which could guide provision of care (Haddrill et al., 2014). While the ZDHS 2013 – 2014 recorded 398 maternal deaths per 100,000 live births countrywide (CSO et al., 2014), the LPHO (2016) records stated that Lusaka province alone recorded approximately 185 (absolute figure) maternal deaths in 2015, with postpartum haemorrhage (PPH) and hypertensive disorders being the leading causes of death. According to Gross et al., (2012), maternal deaths can be averted with prompt and adequate diagnosis and care. Although there is no guarantee that ANC can avert obstetric emergencies during pregnancy and childbirth, evidence has revealed that it exposes women to health education on risk factors and encourages them to deliver with a skilled attendant or in a health facility (WHO, 2016).

Consequently, an all-inclusive understanding of consumer perceptions on ANC services rendered in low income countries is very important if existing interventions are to be improved (Mendy et al., 2018). Edie et al., (2015) in their study found out that ANC users' perceptions crucially impacted time of booking and continuity of use of antenatal services as witnessed through perpetuation of delayed ANC booking in developing countries. However, with the few or lack of specific studies that have identified or researched on women's perceptions regarding late antenatal booking in Zambia and Lusaka province in particular, conducting this study was important. A perception is defined by Shibata (2017) as a way of how something is regarded,

understood or interpreted; and in the case of this study the focus was on how women perceived late ANC booking. In a study by Mendy et al., (2018), women perceived early ANC booking to be very important because it showed good benefits for their wellbeing as well as those of their babies achieved through routine check-ups during ANC visits.

Antenatal care is known to be one of the three pillars of maternity care. Under the guidance of the WHO (2016), countries have adapted guidelines for the provision of this very important service. One important guideline is pregnant women's gestational age at booking. Zambia through the MoH (2011) has placed the highest importance with regard to the earliest antenatal booking, which is at or within 14 weeks gestation. This allows women to be screened thoroughly by midwives and have baseline data, which can be followed through the maternity continuum of care. Nonetheless, women have continued to book late for ANC in both the rural and urban areas of Lusaka province. In the absence of information on women's perceptions of late ANC booking, this study was conducted.

1.1 Statement of the problem

Lusaka province has continued to track the performance of the indicator on first antenatal booking within 14 weeks of gestation through a designated activity tool known as Performance Assessment Tool (LPHO, 2016). Between January 2015 and December 2016, the indicator performed very poorly with its highest first antenatal booking within or at 14 weeks gestation being 11% and the lowest 4% (LPHO, 2016). The expected number or percentage of pregnant women who are to book within 14 weeks of gestation is 90% in the urban area and 60% in the rural area (LPHO, 2016), but this has not been the case. Hence, it was unclear why women (96%) continued to book late irrespective of the associated risks and the presumed awareness of benefits of booking at 14 weeks gestation (LPHO, 2017). Consequently, majority of women have suffered at the hands of maternal morbidity and mortality with the current maternal mortality ratio (MMR) standing at 252/100,000 live births (CSO et al., 2018). Thus, the current study sought to elicit perceptions of pregnant women; the main stakeholders in the proper implementation of ANC. The table below illustrates how the study sites have performed in relation to ANC booking over three years.

Table 1: First ANC booking within 14 weeks Gestation

Health Facility	2015 %	2016 %	2017 %	HF Overall 1st ANC % Performance	Expected Performance of 1st ANC % Booking <14 Weeks GA
Kanyama FLH	7	9	8	96	90
Chilenje FLH	12	15	17	83	90
Waterfall RHC	5	8	7	71	75
Provincial Performance	4	11	9	83	90

1.2 Factors Associated with Late ANC booking

There are a number of factors that may contribute to late ANC booking. These can be divided under the following broad categories: Cultural, service related, socio-economic, and geographical.

1.2.1 Cultural Factors

Cultural factors have been known to contribute to late ANC booking, and among them decision making when to book for ANC has been seen to predominantly depict a patriarchy trend where husbands and male partners to pregnant women make this decision (Akeju, Oladapo, Vidler, Akinmade, Sawchuck, Qureshi, Solarin, Adetoro, Dadelszen & the CLIP Nigeria Feasibility Working Group, 2016). Other decision makers in some circles include mothers-in-law (Forster et al., 2016). Fear to reveal a pregnancy when it is still small has also been mentioned to contribute to late ANC booking (Akeju et al., 2016). In developed countries such as the United Kingdom (UK), ethnic minority groups such as Black Africans, Asians and Aborigines have been found to book late for ANC (Patel, Rupani& Patel, 2013; Jomeen & Redshaw, 2013; Jong, Jansen, Baarveld, Schans, Schellevis & Reijneveld, 2011).

1.2.2 Service-Related Factors

A department where pregnant women seek health care is perceived to be a very conducive place. The nature of clients and certain amenities lacking in these premises, such as, shortage of staff

and lack of ultra sound scan services, as well as long waiting hours contribute to women deciding to book for ANC late (Ekott, Ovwigho, Ehigiegba, Fajola & Fakunle, 2013; Menon, Musonda & Glazebrook, 2010). Lack of health talks during ANC attendance and least medical consultations received by pregnant women is a discouraging factor to start ANC early (Ekott et al, 2013). It has been seen that poor nurses' attitudes, such as being rude to mothers and a shortfall of skills in the staff attending to pregnant mothers contributed to late ANC booking (Mahiti, Mkoka, Kiwara, Mbekenga, Hurting & Goicolea 2015). Other factors including poor amenities such as seating/waiting area and toilet facilities, as well as lack of privacy in maternity clinics discouraged women from utilising ANC services all together (Menon et al., 2010).

In unpublished data in Zambia, there are a number of factors that have been mentioned to contribute to late ANC booking; and these vary from place to place. These factors have impacted negatively on pregnancy outcomes as seen in most health facilities and some maternal death surveillance and review (MDSR) fora held quarterly in Lusaka province. According to the researcher's anecdotal general observations, some of the factors contributing to late ANC booking include some local practices where midwives only book a certain number of mothers per day, and in most cases only up to 20 mothers a day. This is not a government prescribed practice. Other anecdotal factors include a common trend of allocating one day to conduct ANC activities and closing maternal and child health (MCH) departments on Saturdays, a day that can be appropriate for women in formal employment.

1.2.3. Socio-economic Factors

Socio-economic factors include poor family and husband/partner support systems and perceptions of ANC benefits (Masebe, Mukonka, Muyuya & Engelbreecht, 2017; Forster et al 2016; Gross et al., 2012). Low literacy levels of pregnant women, their husbands/partners, as well as mothers-in-law who do not understand the benefits of booking early for ANC have impacted negatively on pregnancy outcomes (Patel et al., 2013). Other factors include maternal age, equal or more than 25 years of age and low monthly income (Ejeta, Dabsu, Zewdie &Merdassa, 2017). Haddrill et al., (2014) and Gross et al., (2012) have attributed premarital status, unwanted pregnancies, high parity and lack of formal education to late ANC booking. Unemployment, single parent families, medium average income families, residing in a low educated community have also been associated with inadequate use or starting ANC at 24 weeks

of gestation (Jomeen & Redshaw, 2013). Furthermore, economically and socially marginalised pregnant women have been rendered unable to mobilise funds to enable them make decisions and attend ANC early (Forster, 2016).

1.2.4. Geographical Factors

Long distance to health facilities, poor transport access and extreme weather conditions hampered by floods in some places are some geographical factors revealed in some studies as contributing to late ANC booking (Mahiti et al., 2015; Pfeiffer &Mwaipopo, 2013; Forster et al., 2016; WHO, 2006; Blokland, Adazu, Sluster & Lindblade, 2006). In some unpublished data, long distance and poor transport system is also believed to contribute to late ANC booking, particularly in the peri-urban and the rural area of Lusaka province

1.3. Justification

Most studies have revealed that late ANC is a global problem (Masebe et al., 2017; Gross et al., 2012; Menon et al., 2010), and a number of factors have been identified as contributing to this problem, which has an impact on the outcome of pregnancy and childbirth. However, there is scanty information on how women perceived the phenomenon of late ANC booking in Zambia, despite them being important partners in the successful implementation and provision of maternity care (WHO, 2016). The results of this study have led to an understanding of how women in Lusaka province perceive the phenomenon. With these findings, implementation of interventions that encourage women to book at the stipulated time leading to better management of pregnant women have the potential to lead to better outcomes of pregnancy and childbirth. This is very important to Zambia, one of the sub-Saharan countries working towards the achievement of Sustainable Development Goal (SDG) 3, which ensures healthy lives and promotes well-being for all, within the stipulated time (WHO, 2015).

1.4. Purpose of the Study

The purpose of this study was to explore women's perceptions of late ANC booking in order to understand how they reasoned when it came to the timing for the first antenatal visit, so that interventions aimed at encouraging and sustaining early antenatal booking are put in place.

1.6. Research Objectives

1.6.1 Research Objectives

The general objective of this study was to explore perceptions of women in Lusaka province towards late antenatal booking.

1.6.2 Specific Objectives

1. To describe how antenatal women in Lusaka province perceive late antenatal booking.
2. To elicit the opinions of antenatal mothers on late antenatal booking in Lusaka Province.
3. To extract aspects that influence antenatal women in Lusaka province's perceptions of late ANC booking

1.7. Definition of Terms

1.7.1 Conceptual Definitions

- **Antenatal contact:** This is an active connection of a pregnant woman and a skilled health care provider in the ANC clinic (WHO, 2016).
- **Specialised ANC:** This is the care that is given to pregnant women with specific conditions or risk factors (Forster et al., 2016).
- **Late antenatal booking:** This is booking of a woman to ANC after 14 weeks of pregnancy (LPHO, 2015).

1.7.2 Operational Definitions

- **Booking:** This is the first ANC visit to the clinic by a pregnant woman.
- **Beliefs:** These are specific statements that people in a given community regard as true.
- **Cultural norms:** These are rules and expectations by which a traditional society guides the behaviour of its members.
- **Midwife:** This is a skilled health care provider trained to take care of women from the time they decide to conceive up until they have given birth, and 6 weeks thereafter.

- **Poor groups:** These are a group of women that spend and survive on less than one United States of America Dollar (USD) and fall in the lower economic quantile regardless of where they reside (rural, peri-urban or urban areas).
- **Perceptions:** These are opinions and thoughts of pregnant women regarding antenatal care.

CHAPTER TWO: LITERATURE REVIEW

2.0. Introduction

The purpose of this chapter is to present literature on antenatal care that was reviewed, and is discussed under identified themes in order to give clarity to the generated information. The literature was drawn from studies conducted at global, regional and local levels, including anecdotal reports from the Zambian perspective. The sources of data were extracted using various search engines such as EBSCO Host, PubMed, Chrome, HINARI, the University of Zambia (UNZA) Research Repository, and the UNZA Medical Library. Through these search engines, different journals such as Biomedical Central (BMC) Pregnancy and Childbirth, International Journal for Quality in Health Care, the PanAfrican Medical Journal, the Lancet Global Health, the African Journal of Midwifery and Women's Health, Journal of Community Health, and the BMC Reproductive Health were accessed. The articles reviewed include both published and unpublished hard copies from the UNZA Medical Library, as well as qualitative, and a few quantitative and mixed methods documents.

2.1 Overview

Late antenatal booking in Zambia is defined as an initial visit of a pregnant woman to a health facility within 14 weeks of gestation (MoH, 2017). Whilst the ZDHS places first ANC visit to occur by the end of 16 weeks of pregnancy (CSO et al., 2014), women are found at crossroads due to the lack of preciseness in ANC booking timing which could have led to the midwives providing conflicting information. As a result, this misinformation has led to confusion among the recipients of ANC as pregnant women in Lusaka Province have continued to book late, after 14 weeks gestation. Previous studies and undocumented reports have shown that some elements such culture, socio-economic status, geographical location and some unbecoming behaviours and the structuring of services in the maternal and child health (MCH) department have contributed to women booking late for ANC. The literature below shades some light to this effect.

2.2 Cultural Factors in relation to ANC

Being in a global village, cultural diversity as a driver to late ANC booking has been seen to not only affect adolescent pregnant women who lack power to make decisions, but also older

multiparous pregnant women (Gross et al., 2012; Simkhada et al., 2010). In an ethnographic study by Akeju et al (2016) conducted in Ogun State, Nigeria, results showed that women delayed revealing their pregnancy as long as possible because it was believed that early disclosure could lead to miscarriage due to the notion that supernatural and diabolical forces had the potential to influence pregnancy outcomes. It can be seen from this study that women are deprived of early ANC booking benefits because of a cultural belief. Regardless of the context in which the study was conducted, such cultural beliefs commonly come out of communities that are ill informed and most likely situated in rural areas. Individual characteristics such as women's previous experiences of ANC and pregnancy have also been seen to have an influence on late ANC booking. They indirectly contribute to late ANC booking.

A lot of studies have been carried out to look at experiences of women with ANC in general. However, what the studies have not focused on are the perceptions of women with regard to ANC. According to Henderson et al (2013) in a quantitative study aimed at investigating women's experience and perceptions of maternity care from different ethnic groups in England and Wales; it was observed that women from minority ethnic groups, particularly Black African women suffered some form of segregation. Black women tended to access ANC later in pregnancy compared to their White counterparts. The study also revealed that Black women and other minority ethnic groups had fewer antenatal check-ups, fewer ultra sound scans and less screening (Henderson et al., 2013). Antenatal care is the cornerstone of better pregnancy outcomes and ensures improved maternal and child survival, and if women are disadvantaged in any manner, the benefits of ANC are rendered ineffective. With this kind of experience by Black minority women, their perception of ANC booking is inconceivable in their next pregnancy, especially if they are denied the fundamental privilege of screening and having an ultra sound scan done. Some gaps identified in this study included women being denied quality ANC by virtue of being Black (Henderson et al., 2013). Due to the study being quantitative, some aspects regarding experiences and perceptions could not be elicited.

Another study emphasised that the inclusion of trained focal point persons such as traditional birth attendants (TBAs), religious leaders and other opinion leaders working as community volunteers in close collaboration with existing community structures and health services could change the cultural concept with regard to decision making as to when to book for ANC (Mushi et al., 2010). In Zambia, some communities, including some parts of Lusaka, do have TBAs,

religious leaders, including chiefs and traditional rulers working in close collaboration with healthcare workers. Yet, Lusaka province has continued performing poorly in first ANC attendance within 14 weeks of gestation.

Additional studies have shown that many women attended ANC due to cultural norms and rituals without an awareness of the health benefit of prenatal care (Gross et al., 2012). Munguambe et al., (2016) in a qualitative study attributed barrier to health seeking behaviours in pregnancy to discouragement by partners or husbands from revealing pregnancies early in gestation; thus, leading to late seeking of ANC services. This act that is believed to protect the pregnancy from witchcraft constitutes a missed opportunity for care meant to identify women at risk of complications (Munguambe et al., 2016; Gross et al., 2012; Simkhada et al., 2010). Another qualitative study revealed that the decision to attend ANC is not only made by expectant mothers, but also by different parties related to the family; including village chiefs (Menon et al., 2010). Akeju et al., (2016) adds that key decision makers in many African and Asian communities have been known to be either husbands or mothers-in-law, and their decisions have significantly affected antenatal booking because they are often ill informed on the benefits of early ANC booking. This affected pregnant teenage mothers in particular, as they were disempowered due to patriarchy decisions (Akeju et al., 2016). The authors recommended that the findings, which were predominantly patriarchal, should be used to guide health messaging in order to increase utilisation of maternal health care services. Patel et al (2013), revealed that it was customary to register late for ANC as pregnancy was not considered an illness in India. Due to this fact, there was no urgency, and only 20% of pregnant women managed to register within 12 weeks (Patel et al., 2013). It can be said then that different perceptions, although not expressed as such, from different parts of the world are key drivers to initiating or booking for ANC.

Zambia has been implementing male involvement in matters related to ANC booking in order to encourage partner and husband support, but women have continued booking late for ANC in Lusaka, and the country as a whole (Kashitala et al., 2015; Mweemba, 2015; MoH, 2011). It is assumed that if male partners understand the benefits of early ANC booking, women could be supported to book early, thereby improve pregnancy outcomes. According to the Health Belief Model (HBM) by Becker (1976; 1978), it is only when an individual perceives a threat that may

be caused by a health problem or condition, would they be influenced to seek health care (Polit & Beck, 2012).

2.3 Service Related Factors in relation to ANC

With regard to service related factors affecting ANC booking, many studies that have been conducted are looking at ANC in general. The reviewed studies looked mainly at the quality of ANC in clinics and only measured satisfaction. For instance, Jallow et al., (2012) looked at clients' perceptions of quality of ANC in Nigeria and Gambia respectively, with the view that with good quality ANC services, women would be encouraged to attend ANC, let alone book within the first trimester. Kaswa et al., (2018) in a study where they explored pregnant women's perspectives of late ANC services in South Africa identified personnel, service and organisational reasons for late ANC booking. The Nigeria study revealed that out of 395 women who booked in the first trimester of pregnancy, 25% felt satisfied with ANC services (Jallow et al., 2012). The authors concluded that women would perceive ANC in public hospitals appealing if the staff had better communication skills and improved quality of care other than environmental amenities (Jallow et al., 2012). What is not known is whether or not this perception would impact positively on early ANC booking. Although this study had a 25% satisfaction, it was not clear how many booked in private clinics and those who booked in public clinics (Okunlola et al., 2008). Such information can be useful as early booking may have been influenced by the nature of the context considering that amenities may differ in both types of environment. Women's perceptions were also not elicited but it can be seen how quality of services influenced ANC attendance.

In a quantitative study by Waller et al., (2016) it was revealed that women had suboptimal rates of ANC screening and management of risks, which influenced their timing for ANC booking. The study also revealed that women reported using a 'Yes' or a 'No' answer to gauge the quality of ANC services; which is not adequate to inform policy (Waller et al., 2016). Therefore, one would assume that as more and more antenatal risks were identified, the women would be assured of quality ANC provision and consequently encourage them to book early for ANC. However, this point of view would hold meaning on perceptions using open ended questions commonly utilised in qualitative studies.

Modification of service delivery in ANC has been found to improve time at which women could book for ANC (Foster et al., 2016). This finding holds true as seen in caseload midwifery care which encourages consistence and continuity of care as opposed to standard midwifery care. This follows rigorous findings in a randomised controlled trial (RCT) where pregnant women assigned to the caseload midwifery care with the same midwife was favoured by most of them (Forster et al., 2016). What is not known in this study is whether or not these aspects would impact on subsequent early initiation of ANC based on women's experiences with the two modes of service delivery.

Other factors as revealed in a qualitative study by Menon et al., (2010) which looked at perceptions of care in Zambian women attending community antenatal clinics in five Lusaka district health facilities include availability of poor amenities as having contributed to late ANC booking. Others are amenities including dilapidated waiting area furniture, rundown infrastructure, lacking privacy, shortage of staff and dirty toilet facilities. The study concluded that these contributed to poor utilisation and were barriers to early ANC attendance (Menon et al., 2010). From a human rights point of view, a study by Mahiti et al., (2015) reported that it is the responsibility of governments to reduce inequalities that limit opportunities of certain groups of women to enjoy safe motherhood services. Respective governments should provide an adequate array of maternal health services that are available, accessible, and acceptable and of good quality, which explained the high maternal deaths in many sub-Saharan countries. This can only be achieved with a congruent health system that ensures quality data aimed at informing various governments on what is happening on the ground (Mahiti et al., 2015).

2.4 Socio-economic Factors in relation to ANC

According to Gross et al., (2012) in a mixed study conducted in south-eastern Tanzania, it was shown that pregnant women were the most economically and socially marginalised. This influenced them to be unable to make independent decisions and mobilise funds to meet their own needs during pregnancy. A study by Mendy et al., (2018) which looked at perceptions on early antenatal booking in Gambia concluded that educational sessions should include family and community participation in order to deal with barriers that affect early booking. Sinyange et al., (2016); Akeju et al., (2016); Gross et al., (2012) and Jong et al., (2011) in their studies revealed that unemployment, women who had problems in getting money, and uninsured status due to

financial disempowerment underutilise prenatal services. Sinyange et al., (2016) further added that there is need to re-pack health education promotion messages to specifically target the poor groups. A study by Maimbolwa et al (2019) which looked at women's experience with socio-economic factors associated with perinatal morbidity and mortality in Lusaka and Mumbwa Districts of Zambia revealed that money, husbands and family support simplify the burden of pregnancy. This information adds to the various factors contributing to late ANC booking and its implications as revealed in the ZDHS 2007 (CSO et al., 2009) and other studies. This also shows that there is a problem with the poor groups as it has been revealed that late ANC booking is more common in the poor (CSO et al., 2009). It can be assumed then that, experiences of financial disempowerment, being poor, good infrastructure to ensure privacy when women are being examined or counselled, clean toilets, comfortable sitting area, and low education levels have a great impact on influencing the gestational age at which women book for ANC.

Jong et al., (2011) also revealed that experiences of not having previous premature births was another reason that determined inadequate use of prenatal services, as women felt safer and thought that they would experience the same in the current pregnancy. Okunlola et al., (2009) on the other hand revealed in their study that illness in index pregnancy and nulliparity favoured early ANC booking in Ibadan. This was attributed to the advice nulliparous women received from multiparous women as they were considered more experienced. Multiparous women in most instances discouraged early booking (Okunlola et al., 2009). The HBM has made assertions to this effect in that it pays attention to an individual's motivation and personality to desire to comply with treatment as in the case of timing for and utilisation of ANC services (Polit & Beck, 2012).

2.5 Geographical Factors in relation to ANC

In view of geographic location and some ethnic groups residing in certain remote locations, studies have shown that this can limit pregnant women accessing ANC services (Obrist et al., 2009). Some of the factors include long distance to the health facility, unavailability of transport especially at night, poor road access, and extreme weather conditions, which regularly deteriorate the quality of already precarious roads (Akeju et al., 2016; Forster et al., 2016; Munguambe et al., 2016; Mahiti et al., 2015; Gross et al., 2012; Porter & Teijlinen, 2010; Simkhada et al., 2010; Obrist et al., 2009; WHO, 2006). Accessibility during extreme weather

conditions makes it increasingly difficult in the rainy season hampered by floods and washed away bridges (Munguambe et al., 2016). This leads to pregnant women patronising and favouring TBAs to health professionals (Akeju et al., 2016; Mahiti et al., 2015). In a qualitative study by Mkhari (2016) which looked at factors contributing to late ANC booking in South Africa's Mpumalanga province, the study alluded to long distance as an impediment to initiating ANC early.

2.6 Summary

So much has been written about ANC in general, but there is scanty information relating to women's perceptions in relation to ANC booking. Most of the studies, although qualitative in nature, have concentrated on experiences of women with ANC in general as well as satisfaction with service provision. However, studies that looked at perceptions were mainly quantitative in nature and were not related to late ANC booking but rather client satisfaction of the standards in the MCH department. The gaps in the literature supported the need to have this study conducted.

CHAPTER THREE: RESEARCH METHODOLOGY AND DATA

3.1. Introduction

This chapter presents the research methodology that was used in the study. It describes the research design, study setting, study population, sampling method, the tools and techniques that were used, as well as how the data were managed and stored. The chapter also discusses ethical considerations.

3.1 Study Design

In order to adequately explore the perceptions of pregnant women regarding ANC booking and ANC in general, this study adopted a descriptive cross-sectional qualitative study design. The design was considered appropriate for this study because it aimed at describing women's perceptions as they were presented by the study participants, and the data was collected at one point in time.

3.2 Study Setting

Lusaka province comprises of eight districts, namely; Lusaka, Chongwe, Shibuyunji, Rufunsa, Luangwa, Chilanga, Kafue and Chirundu. Lusaka district is the only one considered to be urban (LPHO, 2015). This study was conducted at three government ANC sites of Kanyama and Chilenje first level hospitals situated in Lusaka district, and Waterfalls health centre in Chongwe district. The sites were chosen using purposive sampling based on their poor performance in the uptake of ANC booking before or within 14 weeks of pregnancy, as well as high maternal and infant mortalities as reported by LPHO (2017). The sites have diverse characteristics in terms of geographical location, cultural beliefs and socio-economic status, as well as some service related issues presumed to contribute to late ANC booking. Both Kanyama and Chilenje hospitals rank among the highest with pregnancies among adolescents (12%), the highest number of women attending ANC with a very low uptake of women booking within 14 weeks of gestation, and have both recently been upgraded from urban clinic to first level hospital statuses (LPHO, 2017).

Kanyama health facility is situated in one of the high density areas of the capital city and has a total catchment population of 140, 057 (LPHO, 2017). In addition, the health facility attends to

an average of 630 pregnant women per month because, other than servicing the designated catchment population, it also serves parts of Chilanga and Shibuyunji districts. Thus, it is among the busiest health facilities in the province. Chilenje level one hospital on the other hand is situated in a medium density area with a catchment population of 131, 386 and an average of 400 pregnant women attending ANC per month (LPHO, 2017).

According to the LPHO (2017) report, Waterfalls health centre has a high turnover of pregnant women attending ANC, and most women live within a 25 kilometre radius of the serviced catchment population. It has a catchment population of 7, 628 with a monthly average attendance of 38 pregnant women per month. However, the period beginning January 2018 to December 2018, the health facility attended to over 412 pregnant women (LPHO, 2018). All the selected study sites have organised their clinic days in such a way that Monday is for new attendants. These are pregnant women booking for ANC. Women returning for subsequent ANC visits are attended to on Tuesdays. Special arrangements to attend to antenatal mothers are made when either Monday or Tuesday is a public holiday. Other days of the week are reserved for other MCH services such as postnatal care and family planning.

3.3 Study Population

The study population consisted of pregnant women attending ANC in the three study settings. The target population were pregnant women who booked late.

3.4 Sampling

Purposive sampling was used to recruit the pregnant women who participated in the study. The participants were chosen on the basis that their antenatal cards showed that they had booked late for ANC. Purposive sampling also enabled the researcher to select participants who brought diversity, such as; rural and urban dwelling; high, medium and low residential locations; parity, economic status and marital status to the study.

3.4.1 Inclusion Criteria

Participants were included to the study if:

- They were multiple gravid

- Their pregnancies were categorised as being normal

3.4.2 Exclusion Criteria

Women were excluded from the study if:

- They were unwell.
- They did not consent to participate in the study

3.5 Sample Size

The sample size comprised of 19 pregnant women. Of the 19 pregnant women, eight were from Kanyama First Level Hospital, five from Chilenje First Level Hospital and six from Waterfalls Rural Health Centre. The sample size was not predetermined but was guided by data saturation; meaning that recruitment of participants continued up to a point where no new information was obtained and redundancy had been achieved (Polit & Beck, 2012).

3.6 Data Collection

Data was collected for a period of six months starting from April 2019 to September 2019. All the 19 interviews were conducted in the health facilities in private areas that provided confidentiality and were away from any disturbances. Since ANC clinics are held on Mondays and Tuesdays only; two participants were interviewed every week. Eighteen interviews were conducted in Zambia's vernacular languages of Nyanja, Bemba and Tumbuka, and one was conducted in English. All interviews that were conducted in vernacular were translated into English by the researcher before analysis. To ensure trustworthiness of the translation, a fellow student was asked to listen to captions of randomly selected interviews that were conducted in vernacular and asked to translate them. After the translations were found to be similar to those of the researcher's; translation of the rest of the interviews by the researcher proceeded. The researcher conducted all the 19 interviews.

3.7 Data Collection Tool

A semi-structured interview guide (Appendix IV) was used to collect the data. The first part of the interview guide comprised of participants' socio-demographic characteristics, while the second part comprised of open-ended questions. The questions were phrased in such a way that

the participants were prompted to give some detail regarding the phenomenon under study, such as describing what prompted them to start antenatal clinic the time that they did.

3.8 Data Collection Technique

After obtaining ethics approval (Appendix V), permission to collect data was sought from the Lusaka Provincial Health Director (PHD) of the LPHO (Appendix VI), the Lusaka District Health Director (LDHD) (Appendix VII), and the health centre in-charges of the study settings. After permission was granted, appointments on when to go to the health facilities to explain the purpose of the study to antenatal mothers were made with the health facility in-charges.

On each day of data collection women who were willing to participate in the study after the purpose had been explained had their antenatal cards checked to see the gestational age when they booked in order to ascertain their eligibility to take part in the study. The ones who were found to have booked late were provided with a participant information sheet (Appendix II) in order for them to have in-depth information about the study. Anything that needed clarification was attended to, and if the woman was still willing to participate, a written informed consent (Appendix III) to take part in the study was then obtained. An appointment on when to conduct the interview was made and each participant was accorded a chance to choose a place that was most appropriate to them. Gangon et al (2014) emphasise that location is a fundamental aspect of the interview process because it is one way to engage in reflexivity. Before the beginning of each interview, the researcher began by asking the participant how they were feeling and if they needed anything or clarification on anything. Once the participant became relaxed, a conversation was then started by asking questions in accordance with the semi-structured interview guide. If a participant kept quiet for a while, a probing question was asked in order to encourage continuity of the conversation. Interviews lasted approximately 30 to 45 minutes.

Two tape recorders were used. One was kept as a backup plan in case the other one went off amidst the interview. Permission to use a tape recorder was sought from each participant. A catalogue to take notes of cues that were not possible to be audio-taped, such as facial expressions, mood disposition as well as the nature of environment, and interaction with others were noted. A trained midwife counsellor was at hand to attend to women who felt uncomfortable after recounting hurtful thoughts emanating from the interview. No participant

required counselling services. Participants were offered a drink, a snack and transport refund. At the end of each interview, each participant was thanked for the information shared.

3.9 Trustworthiness

In order to ensure trustworthiness of the study findings, the following guiding principles were followed:

- **Credibility:** The recorded interviews and verbatim transcriptions were given to the research supervisors to verify if the data were truly collected. A semi-structured interview guide was used to ensure that all aspects of the inquiry were covered. The interview guide also gu.ided the researcher in ensuring that participants did not go off track in their narrations. Verbatim responses from participants have been used to substantiate the themes and subthemes that emerged from the data.

- **Dependability:** To ensure dependability, the researcher used member checking to determine accuracy of the findings by taking the final report or specific descriptions or themes back to a select number of participants reachable from each study site to validate whether it was a true representation of what they had said and not the researcher's predispositions or inclination. The researcher also endeavoured to be open and honest throughout the narratives.

- **Transferability:** Transferability was ensured through the use of a sampling method that allowed for selection of participants from diverse backgrounds, hence offering a wide perspective of pregnant women seeking ANC services. By so doing, the extent to which these findings could be transferable in other settings or groups would be attainable.

- **Confirmability:** Audio recorders and field notes were utilised during data collection as well as when interpreting the data to ensure that the entire context of what transpired was presented. The supervisors were availed the interpretation of data from the interviews so that the processes of how the themes were arrived at were clear.

3.10 Ethical considerations

Ethics clearance was obtained from the University of Zambia Biomedical Research Ethics Committee (UNZABREC). Permission was obtained from the National Health Research

Authority Council (NHRAC) at the MoH (Appendix VIII). Permission was further sought from the PHD through the Clinical Care Department, the District Health Office (DHO) through the LDHD, and finally from the health facility managers and the in charges of the ANC Departments where the study was conducted.

The researcher upheld anonymity and confidentiality throughout data collection, data analysis and reporting by assigning codes to each participant to prevent linking of the data source. Informed consents were obtained verbally and confirmed in writing or thumb print from all the participants. Participants were assured that they were free from any victimisation even if they provided negative information regarding late antenatal booking. Study participants were also assured that they were free to withdraw from the study with no negative consequences thereafter. None of the recruited participants withdrew from the study. The audio-taped data, field notes, codes and demographic data were kept under lock and key for confidentiality. The data were also saved on a password protected computer.

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS

4:0 Introduction

This chapter presents how the data were analysed and direct quotes from the participants are also presented to support the themes that emerged. The chapter also presents participants' demographic characteristics. A total of 19 antenatal women were interviewed.

4:1 Socio-demographic characteristics of Participants

In order to provide an overview of participants who took part in the study, their demographic characteristics of age, marital status, level of education, gestational age at booking, whether pregnancy was planned or not, employment status, and distance to health facility are presented in Table 2.

Table 2: Summary of sample characteristics of accessible population (n=19)

CHARACTERISTIC	RANGE	NUMBER
Age	18-24	9
	25-30	7
	31-35	2
	36-42	1
Marital status	Married	15
	Single	4
Level of Education	None	4
	Primary	15
	Secondary	0
	Tertiary	0
Gestational age at booking	16-20 weeks	10
	21-28 weeks	7
	29-32 weeks	2
Pregnancy	Planned	16
	Unplanned	3
Employment Status	Working	3
	House wife	16
Distance to health facility	≤ 5 kilometres	11
	≥ 5 kilometres	8

4:2. Data Analysis

Although data analysis is presented as a step on its own, it began during data collection. Content analysis using Colaizzi's (1978) seven steps was used to analyse the data as follows:

a) **Familiarisation:** After completion of each interview, the researcher listened to it multiple times in order to acquire a deeper familiarisation with the data, and then later transcribed it verbatim.

b) **Identifying significant statements:** After transcribing the data, the researcher read through the transcription multiple times in order to identify significant statements and words that were emanating from the data. The significant statements and words were highlighted and later written along the margins of the documents where data were transcribed. Identified gaps in the data led to modifications and choice of the next participant.

c) **Formulating meanings:** Identifying of significant statements and words from each interview was followed by extracting meanings that they were putting across and these were written on a different page. The interviews were looked at thoroughly, individually and as a whole. This step guided the researcher in determining that saturation had been reached.

d) **Clustering themes:** The formulated meanings were then organised, and clustered into meaningful themes that described what the women were saying. The clustered themes were then referred back to the original interviews for validation.

e) **Developing an exhaustive description:** Final themes were then integrated into an exhaustive description of the phenomenon that was being studied.

f) **Producing fundamental structure:** The researcher then condensed all exhaustive description down to a short, dense statement that captured aspects deemed essential to the structure of the phenomenon under study.

g) **Seeking verification:** This was done by taking the final description of the phenomenon to the participants to verify whether the descriptions captured what was said in the interviews.

4.3. Presentation of Findings

Two major themes namely Unaware of the concept of late ANC booking and Perceived barriers to timely ANC booking emerged from the data. The first theme was supported by two subthemes; Unsure of the ideal ANC booking gestational age and Women's decision making on timely ANC booking. The second theme was supported by five subthemes; The need to come with spouse/partner for ANC booking; Fear of getting tested for illnesses; Attached monetary costs to ANC booking; Stigma attached to single parenthood; and Amenorrhoea due to contraceptive use.

4.3.1 Theme 1: Unaware of the Concept of Late ANC Booking

This major theme elucidated participants' perceptions that were focused on the advantages of attending ANC, and not necessarily perceptions of late ANC booking. Majority of the participants did not seem to be aware of the concept of late ANC booking. Hence, instead of responding to the core question and talk about late ANC booking, they rather described a number of different gains that they benefitted from attending ANC. The gains ranged from being attended by midwives who they perceived to be adequately trained, being taught on how to take care of themselves and their babies, gaining knowledge on danger signs, knowing what to prepare in readiness for labour and delivery, to accessing of an antenatal card, which was viewed as a tool that enabled pregnant women to receive care when a need arose. Many of the women said that they attended ANC because they were aware that the midwives who looked after them were well trained. The women mentioned that the type of ANC that was provided by midwives could not be accessed if a pregnant woman decided not to attend antenatal. A prominent benefit of attending ANC that was mentioned by most women was the safeguarding of the life of both the unborn child and the mother. Some expressions of the benefits of ANC were as follows:

"…yes, we have learnt a lot such as how to look after yourself and the pregnancy...how you should keep yourself and the things to prepare when you are pregnant." (Respondent 2)

"…if you come for ANC you can have an ANC card which is a good thing because it helps a lot. When you are coming here and you have a problem, it can't be a big issue because of the fact that you have a card. But if you just stay home, it becomes a problem for instance you develop a problem at home and you come here to be attended to because you are sick, it becomes a big problem for you to get help because you don't have any paper because you were not coming for ANC." (Respondent 3)

"…here at ANC we learn a lot and so it is good to come here, we also know how the baby is. So, it is very good to come for ANC rather than to stay at home where there is nothing going on. When you come here, they examine us, they teach us yes and how to prepare yourself for labour and also personal hygiene (cleaning of the private part)." (Respondent 7)

A reason that was given by some participants for attending antenatal was related to them being unwell. They did not relate booking to the need to do so before a certain gestational age. Some of the responses were:

"...I started ANC because I was not feeling well so I wanted to rule out why or what was causing those problems." (Respondent 14)

"...okay for me I started ANC because I was feeling sick. I said let me check then I decided to start ANC because the first thing to suspect is I was pregnant. If it was ruled out, I was not pregnant then we seek other further medical attention." (Respondent 19)

Some participants mentioned that it was important to book for ANC early because doing so provided them with an opportunity to be taken care of well by the midwives and being provided with essential medication, as well as having the condition of the foetus monitored. One participant said:

"...when you come here when the pregnancy is still small, the midwives look after us very well...we are assisted because they give us medicine... When they notice that the baby is not growing well in the tummy... they send you for scan so that you know." (Respondent 3)

Some participants mentioned appreciating ANC visitors, particularly if they were accompanied by a spouse/partner, stating that it gave them confidence and trust in one another. One woman said:

"...I came with my husband... I think it's good..., to tell you together about things required together" (Respondent 12)

This major theme was supported by two subthemes; Unsure of the ideal ANC booking gestational age, and women's decision-making on timely ANC booking.

4.3.1.1 Unsure of the ideal ANC Booking Gestational Age

This subtheme explicated the reasoning for participants to avoid answering the core question directly. Majority of the participants were not sure of the ideal gestational age to book for ANC. Although some of the participants mentioned the terms early and late; the terms were used

loosely and not attached to a specific gestational age. One participant who mentioned the terms early and late expressed herself this way:

"...So, like for me I know I was late... I should have come yes early may be at 3 or 4 months... at 5 months, but 5 months passed then I said I will go at 6 moths but 6 months also passed just like that. I know it's not good to come late. When you delay going for ANC you can't know a lot of things." (Respondent 4)

For some participants, instead of mentioning the terms early and late, they mentioned that they were supposed to book for ANC as soon as they realised that they were pregnant. They too did not attach the expression 'as soon as one realised that she was pregnant' to a gestational age. Some mentioned the purpose of initiating ANC as soon as one realised that she was pregnant to high rates of child mortality in the country. Some participants said:

"...I think as soon as you know you are pregnant you are supposed to start because there is a high rate of child mortality. I just feel somebody should start as early as they know they are pregnant so that good care is taken." (Respondent 7)

Other participants mentioned that it was important for women to book for ANC as soon as they knew that they were pregnant because of the high maternal and child mortalities. Participant 12 put it this way:

"...There is a high rate of child mortality especially you know so women I feed should decide to start ANC as early as they know they are pregnant so that good care is given to them...I think it's better to decide and start your antenatal early so that you prevent all those things from happening." (Respondent 12)

Even if some women mentioned that they were supposed to start ANC early, based on information that they were given during their previous pregnancies; they still booked late because they were uncertain of the exact booking gestational age. One woman said:

"...Yes, I know. Yes, because we are sensitised actually like previously for my first pregnancy, we were told that the moment you know that you are pregnant, you should commence the antenatal. But I booked at 4 months because the first month I was not sure." (Respondent 19)

Few participants who mentioned a particular gestational that they thought was ideal for ANC booking ironically described that it was better to delay booking because booking early would subject one to too many antenatal visits. In their view, if a woman began antenatal as soon as she realised that she was pregnant, she was going to attend ANC so many times, which was tiring, and also subject one to spending a lot of money on transportation and long waiting hours. This is what one participant said:

"...pregnant women should start ANC at 2 months but others when you tell them that ANC is good to start early, they say that when you do that you will keep on going back for so many times and what if you are giving birth at 10 months. Think of transport and the queues at the clinic. It is better to delay starting your ANC so that you just go a few times and you give birth." (Respondent 8)

Another participant associated the importance of booking for ANC early to nurses and midwives helping to clarify doubts on gestational age. She said:

"...yes I feel it's necessary to have a specific period because some people you find that they have not counted well and one will be thinking the pregnancy is 2 months but when you go there you explain, the nurses will guide you..." (Respondent 19)

4.3.1.2 Women's decision making on Timely ANC Booking

This subtheme supported the major theme of women not being aware of the concept of late antenatal booking by revealing that pregnant women were at the core of deciding when to book. Most participants mentioned that since women were the ones that got pregnant, it was only appropriate for them to make the decision on when to book for their first ANC attendance. Some participants said that ANC booking was a woman's decision, and so if one delayed to book, it was because they were indecisive. This is what some participants said:

"...Sometimes you can think that you will go for ANC booking this month then that month passes and you say I will go on Monday and Monday just passes you then tell yourself Friday comes just like that and that's why like for me I came at 7 months." (Respondent 4)

"...the things that cause a woman to delay to come for ANC it's just the woman who has decided to do that because once a woman finds out that they are pregnant, whilst the pregnancy is still

small, they need to prepare to come to the clinic and not saying that they will start when the pregnancy is 7 months or 8 months." (Respondent 9)

In relation to women not clearly coming out with the exact gestational age when ANC booking can be referred to as late, the second theme that emerged from the data was on the barriers that influenced women to book for ANC late.

4.3.2 Theme 2: Perceived barriers to Timely ANC Booking

Similar to the motivation for the first major theme, this second them explicated participants' diversion of the study topic to perceived barriers to what they perceived as timely ANC booking without necessarily mentioning the specific gestational age. This major theme emanated from the barriers that were cited to have an influence on pregnant women booking late.

One major barrier to timely ANC booking that was identified by most participants was the perception that pregnant women were required to bring along their spouses or partners. If for any reason the spouse/partner was unavailable, participants reported that a pregnant woman ended up booking late. Five subthemes that supported this major theme were; the need to come with spouse/partner for ANC booking; fear of being tested for illnesses; attached monetary costs to ANC cards; stigma attached to single parenthood, and amenorrhoea due to previous contraceptive use.

4.3.2.1 The need to come with Spouse/Partner for ANC Booking

Although some women mentioned that they knew that they needed to start attending ANC early, they could not do so because they were expected to bring their spouses/partners along. They stated that this proved to be difficult due to the nature of work for some of their spouses/partners. Most spouses and partners were said to be casual or daily classified employees, and hence, it was hard for them to be released from work in order to accompany their wives/partners for ANC booking. Some participants complained by saying:

"…Yes, we are told to come with our husbands and if you tell your husband that you are supposed to come with them here, if he agrees and goes to work, he is supposed to get permission from work but are denied. For me I came here alone because when I saw he became

busy and was not allowed time off, I told myself that I don't have to wait, time was going and that is how I decided to come for ANC booking alone and I was late." (Respondent 3)

"...I started at 5 months. I was late because I was waiting so that I can be escorted by my husband but he was never free at work...I noticed that I was very late that's when I decided to come alone because he was not getting any chance at work... He doesn't find free time..." (Respondent 5)

Some mentioned that they were not attended to; and denied ANC because they were not accompanied by their spouses/partners at their booking visit. Two participants said:

"...Yes, I started late at 8 months because they wanted my husband who was not around. I went there alone and they sent me back to come with my husband..." (Respondent 6)

"...I came but I was returned because my husband was at the farm for the madam at the school where he is working... so they told me they wanted my husband so I had to go back...." (Respondent 15)

Some spouses/partners were reported not to be willing to escort their wives for ANC booking because of being tested for conditions and illnesses such as HIV/AIDS. One participant said:

"...some of the husbands are not willing to go antenatal with their wives because they are scared of being caught if they are sick because they normally check your blood for HIV and AIDS, for syphilis and some other diseases." (Respondent 11)

Another participant mentioned that women from the area where she came from were required to go to the ANC for booking with their husbands or a letter from the chief. She said:

"...where I come from...if you haven't gone with the man who made you pregnant, they make you pay...and you also need to go with a letter from the chief...This is how it is...If you don't have a letter you have to pay..." (Respondent 16)

4.3.2.2 Fear of getting Tested for Illnesses

The second subtheme that prevented women from booking early was encompassed in the barrier of fear of being tested for illnesses. One respondent had this to say:

"…Some women are afraid to be examined for diseases because some women do not want to know their health." (Respondent 4)

4.3.2.3 Attached monetary costs to ANC Booking

A few participants mentioned that they found it hard to book for ANC early because they did not have enough money to pay for the antenatal card. This led them to delay booking because paying for an antenatal card was viewed to be an expensive venture. One participant said:

"…since I don't work, I was waiting to make the amount of money to buy a card. Yes, some nurses sell cards. My neighbour also told me that she paid." (Respondent 3)

4.3.2.4 Stigma Associated with Single Parenthood

This subtheme had references that related to cultural beliefs of communities in Zambia. Participants who were not married mentioned that there was a practice of not disclosing pregnancy early, which was related to fear of shame and being prejudiced at place of work if an unmarried woman got pregnant. Participant 10 put it this way:

"…But for me I started at 5 months... and it was a situation where I was hiding. I am not married. I did not want people to know then at the end I just revealed and started going for ANC. You just know at work where there are just women they talk too much. They can even start saying yes she is pregnant so that is why I did not want them to know early that I was pregnant for fear of getting fired because when you are not lucky, you can find that the next contract misses you." (Respondent 10)

Another woman narrated booking late because she was pregnant for a second time while still attending secondary school. She said that she was afraid of being shouted at by her parents. She said:

"…I booked at 6 months. The thing is...I booked at 6 months coz my fiancée told me no it's just too early to have another child and you are in school you haven't completed so it will be complicated. Probably your parents are going to be like no you are not concentrating this and this so that's the reason why my second antenatal I started late coz he was still thinking." (Respondent 13)

4.3.2.5 Amenorrhoea due to Contraceptive Use

Some participants stated that they booked late because they were not sure whether they were pregnant after experiencing amenorrhoea after contraception use. They reported staying at home hoping that their menses would normalise in due course. This is what some participants said:

"...yes, I started at 5 months. I delayed a bit because I was doubting. Before I had this pregnancy, I was getting the 3 months injection. I was still doubting... yes because the time I stopped having menses in July, I waited hoping I would have my menses" (Respondent 3)

"...I came at 4 months. For me I thought I was not pregnant because of the injectable FP because I thought I would have the menses and I told myself to wait a little bit and they didn't come." (Respondent 7)

Some participants got pregnant in between changing family planning methods. They continued with their new family planning methods, and were only prompted to start ANC when they felt foetal movements. Two women verbalised their experience this way:

"...I started at 4 months because of family planning. I did not know I was pregnant because initially I was on a 3 monthly injection and I was having menses 3 times in a month. So, I went to the clinic and they told me to start using the 2 monthly injection but my body refused the 2 monthly one. So, for me when I went into 3rdmonth that's when I felt movements in my tummy" (Respondent 9)

"...I started ANC at 5 months because I thought I was resting after I was told to stop taking microgynon after I started having abdominal problems. I only went to the clinic for booking when the pregnancy was 5 months after I started feeling movements in the tummy." (Respondent 14)

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.0. Introduction

This chapter discusses findings of the study in light of the data presented in Chapter 4 in relation to prevailing information related to the study topic. The chapter also highlights implications of the study findings in relation to the nursing and the midwifery practice, recommendations, limitations to the study as well as how the findings will be disseminated. The findings are discussed under the two identified major themes.

5.1 Socio-demographic Characteristics of Participants

The study participants consisted of 19 antenatal women, with varied socio-demographic characteristics, and had booked late for ANC. The participants were not reprimanded for booking late and neither were they notified that they had booked late. Majority of the participants did not have formal education and were unemployed. This finding is consistent with a finding from a study by Kisaka and Leshabari (2020) which revealed that education significantly predicted early ANC booking. Women with higher education beyond primary school level tend to book early for ANC services than those with lower level of education (Kisaka and Leshabari, 2020). The socio-demographic characteristics also showed that majority of the participants were married. A number of studies conducted in Zambia have shown that in Zambia pregnancy is more acceptable in the confines of marriage. One of the themes that emerged from Kwaleyela et al (2019) on women's experiences of childbirth was 'conforming to societal expectations', which elucidated the Zambian society's unacceptability for an unmarried woman to get pregnant. Thus, marriage is one of the predictors of social support in Zambia, which plays an important role during initiation of ANC. However, in this study marital status was not a predictor of when a woman booked for antenatal because both married and unmarried women booked late for ANC. This is in contrast of the finding in the study by Kisaka and Leshabari (2020) who stated that being married facilitated early ANC booking.

A characteristic which had influence on whether a pregnant woman booked on time or not in this study was the source of income, which for most of the study participants was provided by a spouse or a male partner. Most of the participants were in informal employment; they were mainly farm workers and/or domestic workers, and at the same time they mentioned that they

were housewives. Those who were employed stated that they booked late for ANC due to the fact they were paid low wages and therefore, prioritised their needs by putting household needs such as feeding and clothing ahead of ANC booking. Participants who were full time housewives explained depending entirely on their spouses' incomes, whilst those who were unmarried depended on their parents for financial support.

The average gestational age at ANC booking for participants in this study was 23 weeks. This is way above the prescribed gestational age for ANC booking as prescribed by the GRZ. Nine respondents made their first antenatal booking at 20 weeks; the one who delayed the most booked at 32 weeks gestation, and the earliest booked at 16 weeks gestation. The participant who booked at 32 weeks gestation was a teenage unmarried school-going primigravida, and she associated her late booking to the clinic regulation of having pregnant women being escorted for ANC by either a spouse or partner. The finding was similar to the one from a study by Manyeh et al., (2020) in which it was revealed that some school going pregnant teenagers feared disclosing their pregnancies early because they were afraid of some social ramifications, such as being dismissed from school and stigmatisation of getting pregnant outside wedlock, and hence, they delayed in booking for ANC. The finding of general late booking of participants is consistent with findings from a study conducted in Tanzania, which revealed that even though women knew that there was need for them to book for ANC as early as they realised that they were pregnant, theory which suggests as such does not necessarily translate into practice (Kisaka and Leshabari, 2020). In addition, contrary to a study by Gross et al (2012), which revealed that teenage mothers seemed to have had close relatives who advised them on early ANC booking and ended up booking early, the teenagers in this study booked late because majority of them did not have supportive male partners or husbands to accompany them to the clinic for the first ANC booking. The other commonest reason that they gave for booking late was that they were expected to show healthcare workers items such as gloves and baby layette in preparedness for childbirth.

Most of the participants were aged between 18 years and 42 years with the younger proportion being in the majority. Majority of the younger participants stated that they booked late because they spent a lot of time trying to convince their spouses and support persons to allow them to go for antenatal. Thus, as mentioned earlier, the older married multiparous women tended to book earlier compared to the younger single primigravidae. This finding is contrary to a study finding

by Okunlola et al (2009) who reported that multiparity contributed to late ANC booking because the women considered themselves to be more experienced as far as pregnancy was concerned.

5.2 Theme 1: Unaware of the concept of late ANC booking

This first major theme revealed that participants were not aware that there was an important concept in midwifery referred to as 'late antenatal booking'. Hence, even though some participants mentioned starting ANC late or early, none of them pointed out what gestational age entailed late or early ANC booking. Majority of them generally mentioned gestational ages ranging from 12 weeks to 24 weeks interchangeably in months without stipulating whether they perceived that they booked late or early for their first ANC visit. They rather described the gains of attending ANC.

There are several gains to both the mother and the unborn child that participants mentioned when a mother books for ANC early. ANC has been known to be an effective intervention provided for women whose primary aim is prevention, detection and treatment of modifiable pre-existing medical conditions and pregnancy related complications (Kisaka and Leshabari, 2020). According to Jinga et al (2019), the gains of early ANC booking also include provision of routine information to pregnant women regarding nutrition during pregnancy and support for them to make pregnancy and birth a positive life experience. In this study, in-depth interviews conducted with 19 pregnant women who had booked after 14 weeks of gestation revealed that majority of them understood and appreciated the benefits of early ANC booking despite their booking late. Some participants' perceptions of late ANC booking seemed to be based on information provided to them during previous pregnancies and/or positive or negative experiences. This can be corroborated by findings from a study by Akeju et al (2016) who found that individual characteristics such as women's previous experiences of ANC and pregnancy had an influence on their ANC booking time. On one hand, most women's actions to book at the time that they did were influenced by factors such as, institutional regulations or social norms. Some participants narrated that during their previous pregnancies' midwives informed them when to book for ANC. However, some women stated that they booked at the gestational age they did because they were influenced by what they were told by friends in the communities where they lived, and that they were informed that they would end up getting tired of going for ANC because the numbers of visits were too many. This finding illustrated the fact that the women did

not understand the reasoning behind the number of ANC visits and whether the timing for booking was important or not. This finding is supported by a study by Roberts et al (2018) which revealed that cultural beliefs were a foundation of how women seek and utilise health care, and as such, it is very important for healthcare providers to develop culturally competent mindsets, and be culturally sensitive in their provision of healthcare services to women. It is thus necessary for healthcare providers to be precise in their interactions with women and avoid using words such as early and late ANC booking without relating them to specific time periods. There is also need by MoH stakeholders in Zambia to clarify what the ideal time for a pregnant woman to start antenatal is. At the writing of this study, available documents mention 12, 14 and 16 weeks gestations. This presented a challenge to healthcare providers who are frontline workers in the provision of ANC.

The study participants mentioned the gains of general antenatal attendance such as being looked after by trained healthcare providers, particularly midwives, gaining knowledge on a number of aspects namely danger signs of pregnancy and the baby, birth preparedness as well as accessing an antenatal card. These findings are in agreement with those of a study conducted in Tanzania, which showed that poor adherence of providers in teaching women on danger signs may result in low levels of awareness hence, highly exposing most pregnancies to maternal and foetal complications (Bintabara et al., 2019). Despite the participants' articulation and acknowledgement of the importance of learning about danger signs, they still ended up booking late for ANC. They mentioned various reasons such as; the need to attend the first ANC visit with spouses, being uncertain of being pregnant due to prior use of contraceptives, and too many antenatal visits to have contributed to their booking late for ANC. Some scholars have reported that it is only when a pregnancy is under threat or the pregnant women felt sick can they book for ANC early; thus, the absence of any pregnancy related complication was a major reason for initiating ANC late (Kotoh and Boah, 2019). One woman in the current study cited a reason of feeling unwell as a factor which prompted her to visit the ANC facility for booking. However, in accordance to the standards pertaining to the provision of ANC in Zambia, she still booked late, and this raises the question of whether she understood the concept of late ANC booking. An attributing factor of relating ANC booking to feeling unwell could be lack of knowledge on disadvantages of late ANC booking. This finding is supported by a study by Kotoh and Boah

(2019), which revealed that initiation of ANC was in most instances prompted by signs of illness, as most women felt unmotivated to go for ANC in the absence of illness.

The present study also found that the women interviewed portrayed that other health delivery services, such as, health education on HIV/AIDS, syphilis testing, and care of the newborn were provided effectively to pregnant women during antenatal visits. However, what was not mentioned was whether the services would have been more beneficial had the women booked early. The participants instead expressed the reality that other considerations such as the need to bring their spouses or partners along were important in booking early. Nonetheless, Mendy et al. (2018) reported in their study that women perceived early ANC booking to be very important as it gave them an opportunity to benefit from the routine check-ups provided, thereby ensuring the wellbeing of their unborn babies and providing a better platform for good maternal and neonatal outcomes.

Additionally, the participants in this study unanimously agreed that they believed in the midwives having the knowledge to care for their unborn babies and themselves. They reported that it was very important that their pregnancies were left in the hands of qualified personnel, such as midwives because they were educated and thus, possessed adequate knowledge and skills. They also mentioned having some tests such as abdominal ultra sound scans and physical examinations to check the wellbeing of their babies in utero. As such, majority of the participants perceived ANC as being beneficial to both their unborn babies and themselves despite them booking late. Thus, even if the women were aware of the general benefits of ANC, they did not fully understand the impact of late ANC booking, such as depriving the healthcare providers an opportunity to have adequate background data of the pregnant woman to enable them plan adequate subsequent care as the women underwent various screening procedures to identify disease and foetal abnormality assessment which could be corrected in good time before labour and delivery.

Antenatal booking at 14 weeks of pregnancy in Zambia is government policy and mentioned by CSO et al., (2009) as the ideal time due to the perceived better outcomes of pregnancy. However, the WHO (2018) model of ANC, states that the first ANC is to be undertaken within 12 weeks of pregnancy. In this study, many women were not aware of the ideal gestational age for ANC booking as stipulated by the government. They narrated that the first time that they attended

ANC was necessitated by a lot of reports on high child mortality rate. Although some participants agreed that midwives in health facilities had informed them and sensitised them about the government stipulation of starting ANC as soon as they suspected that they were pregnant, they mentioned different gestational ages at which they were expected to book. A study by Kaswa et al (2018), revealed that healthcare workers as sources of information on ideal booking time was unreliable; the women preferred information from peers and their mothers. This was in contrast with the information from this study in which some participants reported that the information they got from friends was very unreliable and misleading. Some of the participants reported being told by friends that they would get tired of the numerous numbers of antenatal visits by the time they reached nine months gestation. The peers were also reported to have discouraged some participants from booking early, stating that the several revisits were going to be very costly, thereby, negating the core purpose of these visits.

The practice that women should commence antenatal at 12 weeks requires a high level of provider adherence to first-visit ANC standards, such as taking a full client history with some aspects of previous pregnancy, danger signs of current pregnancy, a physical examination, conduct routine tests such as urinalysis and haemoglobin estimation, provision of supplementation in form iron/folate, tetanus toxoid and advice on preparation for delivery in order to encourage the women to book early (Bintabara et al., 2019). The model relies on highly trained personnel who adhere to guidelines, regular distribution of basic medicines and diagnostic equipment. Dorji, Das, Bergh, Oo, Gyamtsho, Tenzin, Tshomo and Ugeni, (2019) affirm that in urban areas experienced family members and friends, the internet and health care workers played a crucial role in providing information and guidance on booking although most friends provided incorrect information. The finding in this study revealed that friends usually misled their peers and provided them with wrong information. For instance, on the increased number of ANC visits in relation to the booking time, the women reported that they were informed by their friends to book late as attending many antenatal visits was tiring and expensive. Such type of information underplayed the importance of early booking and the preventive approach with regard to ANC vis a vis other benefits of early ANC.

Decision making is a key to early ANC booking as it is known to safeguard the wellbeing of pregnant women and their unborn babies, and prevents poor pregnancy outcomes (Patel et al., 2013). However, due to competing decision making tendencies associated with timing of ANC

booking, more than 830 women die daily from preventable pregnancy related complications (Kisaka and Leshabari, 2020). From a study conducted in the sub-Saharan African region, cultural factors have been cited to depict a male dominated trend in decision making among marginalised women (Mushi et al., 2010). In contrast to this assertion, participants in this study intimated that women were the sole individuals in deciding the right time to book for ANC because they were the ones invested with the responsibility of being pregnant, and if any problem was to arise, it was the pregnant woman who would suffer. This finding is supported by a study conducted in India, which revealed that the primary decision maker for deciding the first ANC visit or booking was the mother (Dorji et al., 2019). Gudayu, Woldeyhannes and Abdo (2014) recommended in their study that women involvement in decision making is crucial as it helps mothers to utilise maternal health services, which directly and indirectly reduce maternal morbidity and mortality. Further, a study conducted in Ethiopia concluded that mothers who decided to use ANC by themselves and jointly with their spouses were more likely to book at the right time (Gudayu et al., 2014).

Even though study participants mentioned that women were responsible for deciding when to start ANC, they explained that there was a challenge regarding implementation of the decision to start attending ANC because women needed to ask for transport money, money to buy baby clothes, and other commodities such as sanitary supplies from their spouses/partners and guardians. This was one of the reasons mentioned by most women in this study that led to most of them to book for antenatal late. Although culture as a factor influencing men, particularly in the rural area's dominance in their wives/partners' decision on when to book for antenatal, did not come out forthrightly in this study, it can be assumed that it does, as reflected in a study by Akeju et al (2016), which showed that cultural factors were known to have contributed to late ANC booking as decision making was predominantly seen to depict a patriarchal trend. In another study, Mushi et al (2010) recommended that the inclusion of focal point persons, such as religious leaders and community volunteers, could influence the cultural concept as regards who decides to initiate ANC. Another study revealed that women who were married were likely to book for ANC services within 12 weeks of gestation (Kisaka and Leshabari, 2020).

5.3. Theme 2: Perceived barriers to timely ANC booking

According to the health belief model (HBM), perceived barriers are one's feelings on the obstacles to performing a recommended health action (LaMorte, 2019). This theme described what participants perceived to be barriers that impeded women from starting ANC timely. Most of the participants mentioned that pregnant women were required to bring along their husbands or spouses for their first ANC booking. The practice was described to disadvantage most mothers, especially those who did not have stable male partners or those whose partners had difficulties getting permission from work. Consequently, this became a hurdle to accessing timely ANC and as such the women responded by staying home until their partners found time to escort them. Those that did not have spouses/partners explained that they were escorted by their mother or older female relatives.

Male involvement in matters related to ANC were introduced in Zambia in 2011 by the MoH on the premise that if partners understood the benefits of ANC, women could be supported to book early, thereby improve pregnancy outcomes (MoH, 2011). But this has not worked according to the anticipated advantage because most married participants' husbands were described to be too busy fending for their livelihood as breadwinners of their families, and thus were unable to accompany their wives to the first ANC booking. The participants explained that most partners and spouses could not waste an hour or two to accompany their pregnant wives for the first ANC booking as required by the clinic. This in the participants' view led to booking late as women waited for the day that their spouses and partners would be permitted at work. Nevertheless, participants explained that pregnant women gave up on waiting for their partners and spouses and decided to attend on their own. The women who booked without being accompanied by the partners were referred to as being lucky. A number of participants narrated being turned back and not attended to. This finding is consistent with a study by Maluka and Peneza (2018) who reported that pregnant women were denied services and returned back in order to encourage male partners to escort their wives for their first ANC booking. Participants suggested that there was need to create an environment where pregnant women were free to attend ANC on their own, until such a time when their partners were available. This suggestion is supported by the WHO (2015) report on health promotion, which recommends that interventions to promote male involvement in MCH should be implemented in such a way that they respect, promote and facilitate women's choices and their autonomy in decision making. Therefore, health facilities

should not be places where women's autonomy is trampled upon. In addition, men should be provided with a conducive environment to enable them the freedom to escort their wives to antenatal clinic by introducing weekend couple counselling sessions specifically for mothers who are booking for the first time. A study by Maluka and Peneza (2018), reported that there is need to sensitise health care providers at micro level and policy makers at macro level on what works best in involving men in MCH. With regard to women who are not married, healthcare providers should not generalise the regulation on spousal accompaniment but rather encourage those who are unmarried, such as adolescent school going girls and teenagers to be accompanied by elderly support persons (Secka, 2010).

There were a substantial number of participants who reportedly avoided booking early because their peers told them that they would be tested for HIV/AIDS and syphilis. This finding is in agreement with results obtained by Kaswa et al (2018) in a study, which showed that most women feared to be tested for HIV/AIDS, and avoided booking at the correct time, which is within three months of pregnancy (Kaswa et al., 2018). Surprisingly, majority of the women in this study acknowledged that testing pregnant women for HIV was a good move because they needed to know their statuses well in advance before delivery so that them and their unborn babies are closely monitored through the use of ultra sound scan, and be commenced on ART if found seropositive. Other participants narrated that even though some male counterparts of pregnant women were reported to be very busy at work, the main reason why they were not willing to escort their spouses was that they did not want to be tested for HIV/AIDS and syphilis together with their wives. Thus, they stayed away, thereby compounding and perpetuating the problem of late ANC booking in Lusaka province. This finding is similar to a finding by a study by Pollahan et al (2019), which looked at factors associated with refusal of testing among male partners in a perinatal care clinic, which revealed that there was a low rate of couple HIV testing and a substantial portion of discordant infection among positive couples. The unwillingness of partners to undergo testing was caused by the realisation that the women they had married had other partners in the past. It was thus recommended that enhanced psychosocial interventions and complex community interventions could increase male partner involvement and the uptake in prevention of mother to child transmission (PMTCT) services (Pollahan et al., 2019). Similarly, the women in this study acknowledged that although HIV/AIDS testing was seen as an

impediment, majority of the women did agree that in order to prevent vertical transmission of HIV/AIDS, it was vital that this was undertaken.

Antenatal care in Zambia is provided at no cost but some participants' accounts revealed that some health institutions were charging women, contrary to the tenets of the MoH. Others said that some health facilities were charging a small fee for the ANC card. This finding is consistent with a study by Mendy et al (2018), which found that some of the perceived barriers to ANC booking identified by participants included some financial constraint to pay for an ANC card. Participants in this study revealed that they had competing priorities in most homes that included preparing baby layette, which was required to be presented at one ANC session, procuring delivery supplies such as disinfectant (jik) solution, a bucket, two brand new wrappers and a two by two meters black plastic to ensure a safe and clean delivery. The practice of presenting the requirements in front of other women during ANC sessions made most women delay booking for ANC. This finding is not peculiar to Zambia only; in Guatemala, although the government provides delivery services at no cost in public hospitals, women are required to purchase some surgical and delivery supplies due to government supply-chain shortages (Schwartz, 2018). The ability of the women to access quality care at a critical moment such as ANC is delayed due to barriers such as cost of surgical and delivery supplies (Schwartz, 2018).

The concept of pregnancy disclosure is perceived by some women as liberating as it necessitates or encourages them to book (Mendy et al., 2018). On the contrary, in this study, it was not easy for some women to book for ANC on time because they were hiding their pregnancies from peers at work for fear of losing their job as they were unmarried and/or elderly/young. In relation to this, a study by Jinga et al (2019) revealed that some women feared to disclose their pregnancies due to the stigma attached to women who are unmarried or under age or older or if the pregnancy is unplanned. An unmarried teenage participant who was having a second pregnancy feared to inform her parents about the pregnancy as she was still going to school, hence she started attending antenatal late. Results from a study conducted by Kaswa et al (2018) which showed that participants claimed that they were scared to disclose their pregnancy to the parents as they were high school learners, are in agreement with the finding in this study.

Majority of the women perceived that there was a strong connection between cessation of a contraceptive method or switching methods and resumption of normal menstrual periods, which

would symbolise the return of fertility. This prompted them to either continue with contraception or decide to conceive; but for most women it was not the case. Their menstruation did not return after cessation or switching contraceptive methods, and were surprised by foetal movements, which confirmed their being pregnant. Accordingly, Haddrill et al (2014) assert that ambivalence or uncertainty was a common reaction amongst women to the news that they were pregnant, if unplanned. In this study, prolonged amenorrhoea was commonly associated with Depo-Provera and Noristerat injectable, and combined oral contraceptives. During the time of waiting for the return of menses, some participants reportedly became pregnant. One participant narrated that by the time she went to the health facility to book, she was informed that she was 20 to 24 weeks gestation, which was way past the required time frame to book for ANC. This finding was also reported in a study by Kaswa et al (2018) whose findings revealed that women who booked late had very little knowledge of contraception leading to some form of ambivalence, which led to their delayed booking for ANC. HIV/AIDS transmission rate is high among Zambians, with 16% infection rate among Lusaka residents (LPHO, 2015). It can therefore be theorised that antiretroviral treatments could counteract with the potency of contraceptives and might lead to low efficacy of hormonal contraceptives, leading to women unknowingly getting pregnant. Gross et al (2012) in a study conducted in South Africa reported that late recognition of pregnancy and subsequent delay of ANC attendance was reported after receiving Long Acting Hormonal Contraceptives (LAHC) in form of injectables. In addition, these findings can also be likened to what was revealed in the Gambian study in which some women were uncertain that they were pregnant because they did not menstruate soon after contraceptive use (Mendy et al., 2018). Haddrill et al (2014) assert that women who attribute contraception as a cause of their delay in booking for ANC could be as a result of lack of knowledge on the part of the women themselves or even the care giver or it could be due to contraceptive failure as the women switched from one contraceptive to the other. Kaswa et al (2018) affirm that majority of women lack knowledge of contraception, early signs of pregnancy, purpose and benefits and timing of ANC booking. Haddrill et al (2014) conducted a study in which they looked at understanding delayed access to ANC, which revealed that feelings of fear, depression and ambivalence or uncertainty were evident in women who avoided booking on time for ANC, particularly women who had considered termination or who felt most likely to be judged such as teenagers or adolescents and school going children.

5.4. Implications of findings to Nursing and Midwifery

5.4.1 Nursing/Midwifery Practice

Antenatal care is one of the pillars of maternity care including labour and deliver as well as postnatal care. The two major themes that emerged reveal an important gap in information dissemination to women concerning the ideal gestation age to book for antenatal. There is need for nurses and midwives to provide information on what gestational age is referred to as late ANC, as well as the associated implications to practice. In order for the benefits of ANC to be achieved, timings for offering services should be made clear. The current practice where different national documents mention different booking gestational ages should be clarified as a matter of urgency.

5.4.2 Nursing Administration

The nursing administration need to strive to ensuring that linkages between nursing and midwifery practitioners are strengthened in order to incorporate perceptions of women because they are a very important component in achieving optimum utilisation of ANC care services at correctly stipulated times.

5.4.3 Nursing Education

Nursing education is mandated to provide mentorship and supervision to practicing nurses and midwives through continuous professional development in order to equip professionals with evidence based and latest information in relation to maternity care, in particular when pregnant women are supposed to book for ANC.

5.4.4 Nursing Research

A lot of positives have been achieved regarding the importance of pregnant women attending ANC. Most countries have statistics of more than 90% of pregnant women attending ANC. There is now a need to focus research on timings when booking should be done, and how the mentioned barriers can be minimised.

5.5. Recommendations

Based on the findings of this study, it is recommended that the Ministry of Health clarify the differences that exist in the timings when women should book for ANC. Additionally, late ANC should be given special attention during interactions with communities and that careful planning should be employed when implementing programmes such as male involvement in maternity care, to avoid interventions from impeding the desired outcomes. It is further recommended that qualitative research involving spouses and partners of pregnant women attending ANC, as well as midwives be conducted to facilitate further discovery of spouses' perspectives as regards late antenatal booking. The study could also be replicated in other provinces with a low performance on ANC uptake at 14 weeks gestation period.

5.6. Limitations

This study was conducted at selected health facilities in Lusaka district, therefore generalisation should be done with caution because of contextual differences, such as education statuses of the population and the urban rural divide.

5.7. Dissemination of Findings

The findings of this study were presented at the postgraduate seminar week. Hard bound copies of the study will be submitted to the UNZA, Medical library and the School of Nursing Sciences. The study results will be disseminated to the MoH, the LPHO, Midwives Association of Zambia (MAZ), as well as the LDHO through workshops, policy briefs and summaries. The findings will also be disseminated to the management of the actual study sites in a summary form by means of presentations to the nurses and midwives at the facilities. The findings will also be published in a peer reviewed midwifery journal and presentations will be made at various midwifery local and international conferences and scientific symposia.

REFERENCES

Akeju, D.O., Oladapo, O.T., Vidler, M., Akinmade, A.A., Sawchuck, D., Qureshi, R., Solarin, M., Adetoro, O.O., Dadelszen, P. and the CLIP Nigeria Feasibility Working Group. (2016). Determinants of Health Seeking Behaviour during Pregnancy in Ogun State, Nigeria. ***BioMed Central. 13(1): 68-97***. Available at http://creativecommons.org/licenses/by/4.0/j. Accessed on 14/03/2018.

Bintabara, D., Nakamura, K., Ntwenya, J., Seino, K. and Mpondo, B.C.T. (2019). Adherence to Standards of First-Visit Antenatal Care among providers: Facility-based survey for improving quality of Antenatal Care. ***PLoS ONE. 14(5): e0216520***. Available at https://doi.org/10.1371/journal.pone.0216520 Accessed on 26/03/2020

Central Statistical Office, Ministry of Health, and ICF International. (2015). **Zambia Demographic and Health Survey 2013-14.** United States of America. p119-134.

Central Statistical Office, Ministry of Health, Tropical Diseases Research Centre, University of Zambia, and Macro International Inc. (2009). **Zambia Demographic and Health Survey 2007.** Macro International Inc. United States of America. p123-136.

Central Statistical Office, Ministry of Health, University Teaching Hospital Virology Laboratory and The DHS Program ICF. (2020). **Zambia Demographic Health Survey 2018.** United States of America. p131-153.

Dorji, T., Das, M., Van den Bergh, R., Oo, M.M., Gyamtsho, S., Tenzin, K., Tshomo, T., and Ugen, S. (2019). **"If we miss this chance, it's futile later on" – Late Antenatal Booking and its determinants in Bhutan: A Mixed methods Study**. *BMC Pregnancy and Childbirth. 19(158): 4-14.* Available at https://doi.org/10.1186/s12884-019-2308-5 Accessed on 27/03/2020

Edie, G.E.H.E., Obinchemti, T.E., Tamufor, E.N., Njamen, T.N. and Achidi, E.A. (2015). Perceptions of Antenatal Care Services by Pregnant Women Attending Government Health Centres in the Buea Health District, Cameroon: A Cross Sectional Study. ***PanAfrican Medical Journal. University of Buea. ISSN: 1973-8688***. Available at http://www.panafrican.med.journal.com/content/article/21/45/full/. Accessed on 02/04/2016.

Ejeta, E., Dabsu, R., Zewdie, O. and Merdassa, E. (2017). Factors determining Late Antenatal Care Booking and the content of care among Pregnant mothers attending Antenatal Care Services in East Wollega Administrative Zone, West Ethiopia. ***PanAfrican Medical Journal. 27(184).*** https://doi.org/10.11604/pamj.2017.27.184.10926.eCollection 2017. Accessed on 02/04/2016.

Ekott, M., Ehigiegba, A., Ovwigho, U. and Fakunle, B. (2013). Perception of Pregnant Women about Antenatal Care in a Cottage Hospital in Port Harcourt, Nigeria. ***Journal of Community Health. 38(2):360-365.*** Available at https://doi.org/10.1007/s10900-012-9625-1. Accessed on 03/04/2016.

Forster, D.A., McLachlan, H.L., Davey, M., Biro, M.A., Farrell, T., Gold, L., Flood, M., Shafiei, T. and Waldenstrom, U. (2016). Continuity of Care by Primary Midwife (Caseload Midwifery) increases Women's satisfaction with Antenatal Care, Intrapartum and Postpartum Care: results from the COSMOS randomised controlled trial. ***Biomedical Central Pregnancy and Childbirth. 16(28).*** Available at https://www.doi.org/10.1186/s1 2884-016-0798-y. Accessed on 26/12/2016.

Gross, K., Alba, S., Glass, T. R., Schellenberg, J. A., and Obrist, B. (2012). Timing of antenatal care for adolescent and adult women in south-eastern Tanzania. ***Biomedical Central Pregnancy and Childbirth.*** *12(16).* Available at http://www.biomedicalcentral.com/1471-2393/12/16. Accessed on 26/12/2016.

Gudayu, T.W., Woldeyohannes, S.M., and Abdo, A.A. (2014). Timing and factors associated with First Antenatal Care Booking among Pregnant Mothers in Gondar town, North West Ethiopia**.** ***Biomedical Central Pregnancy and Childbirth. 14(287).*** Available at http://www.biomedicalcentral.com/1471-2393/14/287. Accessed on 26/12/2016.

Haddrill, R., Jones, G. L., Mitchell, C. A. and Anumba, D. O.C. (2014). Understanding delayed access to antenatal care: a qualitative interview study. ***Biomedical Central Pregnancy and Childbirth. 14(207): 2-14.*** Available at http://www.biomedicalcentral.com/1471-2393/14/207. Accessed on 26/12/2016.

Haddrill, R., Jones, G. L., Mitchell, C. A. and Anumba, D. O.C. (2014) Understanding delayed access to antenatal care: a qualitative interview study**.** ***Biomedical Central Pregnancy and***

Childbirth. 14(207). Available at http://www.biomedicalcentral.com/1471-2393/14/207. Accessed on 26/12/2016.

Henderson, J., Gao, H. and Redshaw, M. (2013). Experiencing Maternity Care: the care received and Perceptions of Women from different ethnic groups. ***Biomedical Central Pregnancy and Childbirth. 13(196).*** Available at http://www.biomedcentral.com/1471-2393/13/196. Accessed on 26/12/2016.

Jallow, I., Chou, J., Liu, T. & Huang, N. (2012). Women's Perceptions of Antenatal Care Services in Public and Private Clinics in the Gambia***. International Journal for Quality in Health Care. 24(6):595-600.*** Available at https://academic.cup.com/intqhc/article-abstract/24/6/595/1823512. Accessed on 03/04/2018.

Jinga, N., Mongwenyana, C., Moola, A. and Onoya, D. (2019). Reasons for Late presentation for Antenatal Care, Health Care providers perspective. ***Biomedical Central Health Services Research. 19(1016): 2-9.*** Available at https://doi.org/10.1186/3/2913-019-4855-x Accessed on 20/04/2020.

Jinga, N., Mongwenyana, C., Moola, A. and Onoya, D. (2019). Reasons for Late presentation for Antenatal Care, Health Care providers perspective. ***Biomedical Central Health Services Research. 19(1016).*** Available at https://doi.org/10.1186/s12913-019-4855-x. Accessed on 12/05/2020.

Jomeen, J., and Redshaw, M. (2013). Ethnic minority Women's experience of Maternity Services in England. ***Ethnicity & Health. 18(3): 280-296***. Available at https://doi.org/10.1080/13557858.2012.730608. Accessed on 02/12/2016.

Jong, E.I.F., Jansen, D.E.M.C., Baarveld, F., Schans, C.P., Schellevis, F.G. & Reijneveld, S.A. (2011). Determinants of Late and/or Inadequate use of Prenatal Health Care in high income Countries: A Systematic Review. ***European Journal of Public Health. 22(6): 904-913***. Available at https://academic.cup.com/surpub/article-abstract/22/6/904/543783. Accessed on 03/06/2018.

Kashitala, J., Nyambe, N., Mwalo, S., Musamba, J., Chishinga, N., Kasonde, P., Lilja, A.M., Mwiche, A. & Welsh, M. (2015). Is Male Involvement in ANC and PMTCT Associated with

increased facility-based Obstetric Delivery in Pregnant Women? ***African Journal of Reproductive Health. 19 (2): 116-124***. Available at http://europepmc.org/article/med/26506664. Accessed on 03/06/2018.

Kaswa, R., Rupesinghe, G.F.D. and Longo-Mbenza, B. (2018). Exploring the Pregnant Women's Perspective of Late Booking of Antenatal Care Services at Mbekweni Health Centre in Eastern Cape, South Africa**. *African Journal of Primary Health Care & Family Medicine.*** Available at https://doi.org/10.4102/phcfm.v10i1.1300. Accessed on 06/02/2019.

Kisaka, L., and Leshabari, S. (2020). Factors associated with First Antenatal Care Booking among Pregnant Women at a Reproductive Health Clinic in Tanzania: A Cross Sectional Study. ***EC Gynaecology*. 9(3): 01-12.** Available at https://www.researchgate.net/publication/342979074_Factors_Associated_with_First_Antenatal_Care_Booking_among_Pregnant_Women_at_a_Reproductive_Health_Clinic_in_Tanzania_A_Cross_Sectional_Study Accessed on 19/05/2020

Kisuule, I., Kaye, D. K., Najjuka, F., Ssematimba, S.K., Arinda, A., Nakitende, G., and Otim, L. (2013). Timing and reasons for coming Late for the First Antenatal Care Visit by Pregnant Women at Mulango Hospital, Kampala Uganda. ***Biomedical Central Pregnancy and Childbirth. 13(121).*** Available at http://www.biomedicalcentral.com/1471-2393/13/121. Accessed on 26/12/2016.

Kotoh, A.M., and Boah, M. (2019). "No visible signs of pregnancy, no sickness, no Antenatal Care': Initiation of Antenatal Care in a rural district in Northern Ghana. ***Biomedical Central Public Health. 19(1094): 2-13.*** Available at https://doi.org/10.1186/312889-019-7400-2 Accessed on 27/04/2020.

Kwaleyela, C.N., Greatrex-White, S. & Walsh, D. (2019). Childbirth experiences of Women birthing in Zambia: An Interpretive Focus Phenomenological Study. ***MIDIRS Midwifery Digest. 29(2): 255-259.*** Available at www.researchgate.net/publication/333828685. Accessed on 22/09/2020.

LaMorte, W.W. (2019). **The Health Belief Model. Behavioural Change Models.** Boston University School of Public Health. USA. Available at https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behaviouralchangetheories2.html Accessed on 12/09/2019.

Lusaka Provincial Health Office (2015). **Action Plan**. Ministry of Health. Lusaka.

Lusaka Provincial Health Office (2015). **Action Plan**. Ministry of Health. Lusaka.

Lusaka Provincial Health Office (2017). **Health Management Information System. Score Card.** Ministry of Health. Lusaka

Lusaka Provincial Health Office (2017). **Health Management Information System. Score Card.** Ministry of Health. Lusaka

Mahiti, G.R., Mkoka, D.A., Kiwara, A.D., Mbekenga, C.K., Hurting, A. and Giocolea, I. (2015). Women's Perceptions of Antenatal, Delivery and Postpartum Services in rural Tanzania**.** *Global **Health Action. 8(28567).*** Available at https://doi.org/10.3402/gha.v8.28567. Accessed on 30/04/2018.

Maimbolwa, C.M., Mukwato, K.P., Muleya, M., Kwaleyela, C., Kalusopa, M.V., Musenge, E., Odland, J.O. & Stray-Pedersen, B. (2019). Women's Experience with Socio-Economic Factors Associated with Perinatal Morbidity and Mortality in Lusaka and Mumbwa Districts of Zambia. ***Scientific Research Publishing. (11): 733-754.*** Available at http://www.scirp.org/journal/health. Accessed on 17/09/2020.

Maluka, S.O., and Peneza, A.K. (2018). Perceptions on Male Involvement in Pregnancy and Childbirth in Masasi District, Tanzania: A qualitative study. ***Reproductive Health. 15(68): 2-7.*** Available at https://doi.org/10.1186/s12978-018-0512-9 Accessed on 19/04/2020

Manyeh, A.K., Amu, A., Williams, J. and Gyapong, M. (2020). Factors associated with the Timing of Antenatal Clinic attendance among First-Time Mothers in rural Southern Ghana. ***Biomedical Central Pregnancy and Childbirth. 20(47).*** Available at https://doi.org/10.1186/s12884-020-2738-0. Accessed on 19/05/2020.

Masebe, E., Mukonka, P., Muyuya, M. and Engelbrecht, S. (2017). Understanding Factors Associated with antenatal Care Usage in Zambia. ***African Journal of Midwifery and Women's Health. 11(2).*** Available at https://doi.org/10.12968/ajmw.2017.11.93. Accessed on 03/04/2018.

Mendy, R., Njie, V. & Sawo, J.S. (2018). Perception on Early Antenatal Booking by Women Attending Clinic in the Western Region in the Gambia. ***International Journal of Nursing and Clinical Practices***. *5(294): 2-7.* Available at https://doi.org/10.15344/2394-4978/2018/294. Accessed on 06/02/2019.

Menon, J.A., Musonda, V.C.T. and Glazebrook, C. (2010). Perception of Care in Zambian Women Attending Community Antenatal Clinics. ***International Research Journals. 1(9): 356-362.*** Available at http://www.interesjournals.org/ER. Accessed on 03/04/2018.

Ministry of Health (2017). **Zambia National Health Strategic Plan. Ministry of Health. Health Policy and Planning.** Lusaka. Ministry of Health.

Ministry of Health. (2011a). **National Health Policy.** Lusaka. Ministry of Health.

Ministry of Health. (2011a). **National Health Policy.** Lusaka. Ministry of Health.

Ministry of Health. (2011a). **National Health Policy.** Lusaka. Ministry of Health.

Ministry of Health. (2011b). **National Health Strategic Plan**. Lusaka. Ministry of Health.

Ministry of Health. (2011b). **National Health Strategic Plan**. Lusaka. Ministry of Health.

Mkhari, M.M. (2016). **Factors contributing to Late Antenatal Care Booking at Thulamahashe Local Area at Bushbuckridge sub-district in Mpumalanga Province.** University of South Africa. p1-62.

Mrisho, M., Obrist, B., Schellenberg, J.A., Haws, R.A., Mushi, A.K., Mshinda, H., Tanner, M., & Schellenberg, D. (2009). The use of Antenatal and Postnatal Care: Perspectives and Experiences of Women and Health Care providers in rural Southern Tanzania. ***Biomedical Central Pregnancy and Childbirth. 9(10).*** Available at http://www.biomedcentral.com/1471-2393/9/10. Accessed on 27/03/2020.

Muhwava, L.S., Morojele, N., and London, L. (2016). Psychosocial factors associated with early initiation of Antenatal Care (ANC) visits in rural and urban setting in South Africa: A Cross-sectional Survey. ***Biomedical Central Pregnancy and Childbirth. 16(18).*** Available at http://doi.org/10.1186/s12884-013-0807-1. Accessed on 27/03/2020.

Munguambe, K., Boene, H., Vidler, M., Bique, C., Sawchuck, D., Firoz, T., Makanga, P.T., Qureshi, R., Macete, E., Menendez, C., Dadelszen, P. & Sevene, E. (2016). Barriers and facilitators to Health Care Seeking Behaviours in Pregnancy in rural communities of Southern Mozambique. ***Biomedical Central Pregnancy and Childbirth. 13(1): 31***. Available at http://doi.org/10.1186/s12978-016-0141-0. Accessed on 26/12/2016.

Mushi, D., Mpembeni, R., and Jahn, A. (2010). Effectiveness of Community Based Safe Motherhood Promoters in improving the utilisation of Obstetric Care. The case of Mtwara Rural District in Tanzania. ***Biomedical Central Pregnancy and Childbirth. 10(14).*** Available at http://www.biomedcentral.com/1471-2393/10/14. Accessed on 27/03/2020.

Mweemba, N.C. (2015). Factors affecting Male Involvement in Antenatal and Postnatal Care Services in Zambia: A case of Kabwe Urban and Chamuka Rural areas in Central Province. ***University of Zambia Repository. p1-116.*** Available at http://dspace.unza/handle/123456789/4624. Accessed on 08/06/2017.

Patel, P.B., Rupani, M.P. & Patel, S.S. (2013**). Antenatal Care Registration and Predicting Factors of Late Registration among Pregnant Women.** *Tropical Doctor. 43: 9-12.* Available at http://dio.org/10.177/0049475513480772. Accessed on 21/06/2016.

Patel, P.B., Rupani, M.P. and Patel, S.S. (2013). Antenatal Care Registration and Predicting Factors of Late Registration among Pregnant Women**. *Tropical Doctor. 43: 9-12***. Available at https://doi.org/10.1177/0049475513480772. Accessed on 21/06/2016.

Pfeiffer, C., and Mwaipopo, R. (2013). Delivering at Home or in a Health Facility? Health seeking Behaviour of Women and the role of Traditional Birth Attendants in Tanzania. ***Biomedical Central Pregnancy and Childbirth. 28(13): 55.*** Available at http://doi.org/10.1186/1471-2393-13-15. Accessed on 26/12/2016.

Polit, D. F. & Beck, C. T. (2012). **Nursing Research: Generating and Assessing Evidence for Nursing Practice. 9th Edition**. pp258-514. Wolters Kluwer Health. New York.

Pollahan, A., Thinkhamrop, J., Kongwahanakul, K., Chaiyarah, S., Sutthasri, N., and Lao-unka, K. (2019). Rate of Couple HIV Testing in a Perinatal Care Clinic and Factors Associated with Refusal of Testing among Male partners. ***HIV/AIDS – Research and Palliative Care. 31(11): 369-375.*** Available at https://doi.org/10.2147/HIV.S23219/.eCollection2019 Accessed on 15/07/2020.

Roberts, J., Marshak, H.H., Sealy, D., Manda-Taylor, L., Mataya, R., & Gleason, P. (2018). The role of cultural beliefs in accessing Antenatal Care in Malawi: A Qualitative Study. ***Public Health Nursing. 34(1): 42-49.*** Available at http://doi.org/10.1111/phn.12242. Accessed on 12/03/2020.

Schwartz, D. A. (2018). **Maternal Death and Pregnancy-related morbidity among Indigenous Women of Mexico and Central America. Global Maternal and Child Health: Medical, Anthropological and Public Health Perspectives.** p63-66. Mexico. Springer Publishing Company. ISBN 978-3-319-71538-4_28.

Secka, E. (2010). **Men's Involvement in Care and Support during Pregnancy and Childbirth, Gambia.** pp5-91. University of Oslo**.** Norway.

Shibata, A. 2017). Sound Symbolism, Speech Identity and Size. ***University of California Berkeley PhonLab Annual Report. 13(1)***. Available at https://escholarship.org/uc/item/3b169895. Accessed on 08/12/2017.

Simkhada, B., Porter, M.A. & Teijlinen, E.R. (2010). The Role of Mothers-in-law in Antenatal Care decision-making in Nepal: a qualitative Study. ***Biomedical Central Pregnancy & Childbirth. 10(34).*** Available at http://www.biomedicalcentral.com/1471-2393/10/34. Accessed on 03/06/2018.

Sinyange, N., Sitali, L., Jacobs, C., Musonda, P. & Michelo, C. (2016). Factors associated with Late Antenatal Booking: population-based observations from the 2007 Zambia Demographic and Health Survey. ***PanAfrican Medical Journal. 25(109). DOI: 10.11604/pamj.2016.25.109.6873.***

Available at http://www.panafrican-med-journal.com/content/article/25/109/full/. Accessed on 22/01/2017.

Waller, A., Bryant, J., Cameron, E., Galal, M., Quay, J. and Sanson-Fisher, R. (2016). Women's Perceptions of Antenatal Care: are we following guideline recommended care? ***Biomedical Central Pregnancy and Childbirth. 16(191).*** Available at http://doi.org/10.1186/s12884-016-0984-y. Accessed on 18/05/2020.

World Health Organisation (2015). **Transforming our World: the 2030 Agenda for Sustainable Development.** Available at: www.refworld.org/docid/57b6e3e44.html Accessed on: 13/05/2020

World Health Organisation (2015). **Transforming our World: the 2030 Agenda for Sustainable Development.** Available at: www.refworld.org/docid/57b6e3e44.html Accessed on: 13/05/2020

World Health Organisation (2019). **Development Panel meeting on WHO Antenatal Care guidelines**. World Health Organisation. Geneva.

World Health Organisation. (2014). **Annual Country Report**. Zambia

World Health Organisation. (2016). **Recommendations on Antenatal Care for a positive pregnancy experience.** Available at: http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/anc-positive-pregnancy-experience/en/. Accessed on 24/07/2017.

World Health Organisation. (2016). **Recommendations on Antenatal Care for a positive pregnancy experience.** Available at: http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/anc-positive-pregnancy-experience/en/. Accessed on 24/07/2017.

APPENDICES

Appendix I

Information Sheet **Institution Code:……**

Participant Code:……...

University of Zambia
School of Nursing Sciences
Box 50110
LUSAKA.

Study Title: Women's Perceptions of Late Antenatal Booking in Lusaka Province, Zambia.

Dear participant,

I am a student in the School of Nursing Sciences at the University of Zambia. I am conducting this study in partial fulfilment of the qualification of Master of Science in Midwifery, Women's and Child Health.

Purpose of the study: The purpose of this study is to explore women's perceptions of late ANC booking in order to understand how they reason when it comes to the timing of the first antenatal visit, so that interventions that encourage early antenatal booking are put in place.

Procedure: I therefore ask you to participate in this study. Your duty as a respondent is to answer the questions in order to help in understanding how women reason when it comes to the timing of the first antenatal visit in the Health facilities. Your decision to take part in this study is your choice and shall be respected.

Risks / Discomforts: There will be no physical risks involved in this study. Should you feel uncomfortable answering some of the questions, you may refuse to answer any questions that you do not want to answer. You may stop being part of the study at any time and this will have no negative bearing on your future attendance to this health facility or deny you services. Your responses or participation in this study will not affect you in any way.

Benefits: This study has no direct profit for participating in this study. The information the study will get from you after the discussion will be used to better understand and change how you and other women receiving ANC will be looked after in future.

Alternatives to Participation: You can either choose to be in the study or not. If you choose to be in the study you do not have to stay in the study until it ends. You can decide to leave the study at any time. Your leaving will not affect you or any other privileges that you enjoy now.

Confidentiality: You are invited to take part in this study. All the information you will provide will be kept in secret. You may wish to know that secrecy is not guaranteed as some private things we will talk about may be shared if required by law. Records may also be inspected by my research supervisor and data analysis by the University of Zambia Biomedical Research Ethics Committee (UNZABREC). Secrecy will also be made certain in that a code or number will be used to identify you by in order to avoid connecting what we talked about to you. The interviews will be conducted in a private place preferably one you will choose with no disturbance and for your comfort. Once we are finished with the study, information collected will be destroyed.

Voluntariness: Your taking part in this study is completely voluntary. You are free to withdraw at any time, for any reason. Should you decide to withdraw from the study, the information you have already provided will be kept in a confidential manner. It will not be shared with anyone else to personally harm or affect you. This will not in any way affect you or any future privileges.

Re-Imbursement: There is no financial re-imbursement for participating in this study.

Contact: Should you wish to talk to anyone about this study because of unfair treatment, or you have any other questions about the study, you are free to call the investigator of the study on 0977798493 or call the University of Zambia, School of Nursing Sciences on +260 211 252641.

Principal Investigator,
Masozi Victoria Nkunika Bweupe.

Appendix II

Consent Form **Institution Code:……**

Participant Code:……...

The purpose of this study has been explained to me and I understand the purpose, the benefits, risks and discomforts and confidentiality of the study. I further understand that if I agree to take part in this study, I can withdraw at any time without having to give an explanation and that taking part in this study is purely voluntary and I can also skip questions that may deem personal or otherwise.

What does your signature (or thumbprint/mark) on this consent form mean?

Your signature (or thumbprint/mark) on this form means:

- You have been informed about this study's purpose, procedures, possible benefits and risks.
- You have been given the chance to ask questions before you sign.

You have voluntarily agreed to be in this study

I …….. (Names) Agree to take part in this study.

Signed …….. Date…… (Participant)

Participant's signature or thumb print.

Signed…… Date……. (Witness)

Signed…… Date …… (Researcher)

The participant to mark a "left thumb impression" in this box if they are unable to provide a signature above.

Persons to contact for problems or questions

1. Masozi Victoria Nkunika Bweupe, Levy Mwanawasa University Teaching Hospital, P. O Box 310084, Lusaka. Cell: 0977798493.

2. Dr Concepta N. Kwaleyela (Supervisor), University of Zambia, School of Nursing Sciences, P. O Box50110, Lusaka.
3. The Chairman, University of Zambia Biomedical Research Ethics Committee (UNZABREC), University of Zambia, P. O Box 50110, Lusaka.

Appendix III

Interview Guide **Institution Code:……**

Participant Code:……...

Study Title: Women's Perceptions of Late Antenatal Booking in Lusaka Province, Zambia.

Section A: Socio-demographic Data

(Please tick the appropriate box)

1. Age……
2. Marital status
    a) Married ☐
    b) Single ☐
    c) Widowed ☐
3. Parity ☐
4. Gravidity ☐
5. Gestational age at booking ☐
6. Ethnicity……..
7. Religion……
8. Where do you live?
    a) High density (crowded) area ☐
    b) Low density (less crowded) area ☐
    c) Medium density area ☐
    d) I do not know ☐
9. Distance from health facility

a) Within 5 kilometres radius ☐

b) More than 25 kilometres radius ☐

c) Within 10 kilometres radius ☐

d) Within 25 kilometres radius ☐

10 Social habits

a) Do you drink ☐

b) Do you smoke ☐

11 Occupation……

12 Mode of transport when coming to the health facility.....

13 Was your pregnancy planned? Yes ☐

No ☐

Section B: Concepts to be covered in the interview

1. Knowledge of late ANC
2. Impact of late ANC (on pregnancy, mother, foetus and any other)
3. Gestational age at booking.
4. Factors influencing antenatal booking (cultural, service, socio-economic, geographic and any other).
5. If there is anything else you would like to add to what we have discussed that you feel we have left out, feel free to speak please.

Thank you so much for the information you have given me and for taking part in the study.

Appendix IV

Timelines (February 2019 to September 2019)

Activity	**Feb 2018**	**Mar 2018**	**Jan 2019**	**Feb 2019**	**Apr 2019**	**May 2019**	**Jun 2019**	**Jul 2020**
Literature Review								
Preparing Protocol								
Protocol assessment								
Ethics Application								
Collecting Data and analysis								
Submission of research report								

Appendix V

Budget

Item	**Unit Cost (ZMW)**	**Quantity**	**Total (ZMW)**
Research Ethics Committee	K 1000	1	K 1000
Stationary	K 160	1	K 160
Tape recorder	K 1400	2	K 2800
Administrative costs	K 7000	6 months	K 7000
Other services	K 3500	6 months	K 3500
Contingency Diary	K 1446	6 months	K 1446
TOTAL	**K 15906**	**6 months**	**K 15906**

Budget Justification

The budget was made available by the Ministry of Health and was used to facilitate movement from point A to point B considering the study sites selected were not only in Lusaka Urban District but included Chongwe District as well. This money also helped to meet most of the administrative costs including binding of final copies of the research proposal, research report and making poster presentations.