DETERMINANTS OF FIRST ANTENATAL CARE VISIT AMONG PREGNANT WOMEN ATTENDING ANC CLINIC IN TENWEK HOSPITAL, BOMET COUNTY, KENYA

KOSITANY HILLARY KIRUI

Thesis Submitted to the Institute of Postgraduate Studies of Kabarak University in Partial Fulfillment of the Requirements for the Award of Master of Medicine in Family Medicine

KABARAK UNIVERSITY

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DECLARATION

1. I do declare that;
   i) This thesis is my original work and to the best of my knowledge it has not been presented to any institution as a research paper for the award or conferment of any academic degree or diploma.

   ii) That the work has been subjected to the process of antiplagiarism and has met Kabarak University 15% similarity index threshold.

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Signed  Date 02/07/2021

Kositany Hillary Kirui

GMMF/M/1349/09/16

RECOMMENDATION

To: The Institute of Post-Graduate Studies

Thesis titled, '***Determinants of First Antenatal Care Visit among Pregnant Women Attending ANC Clinic in Tenwek Hospital, Bomet County, Kenya'*** and written by Hillary Kositany Kirui, is presented to the college of Post Graduate Studies of Kabarak University. We have reviewed it and recommend that it be accepted in partial fulfilment of the Degree of Master of Medicine in Family Medicine.

Signed_____ Date 02/07/2021

Dr. Pamela Kimeto PhD

Senior Lecturer, School of Medicine and Health Sciences

Kabarak University

Signed_____ Date 02/07/2021

Dr. Priscah Mosol (PhD)

Lecturer, College of Health Sciences

Moi University

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ABSTRACT

Pregnancy in itself poses a risk of complication to every individual mother carrying it from conception to postnatal period. Therefore antenatal care Clinic (ANC) is recommended to identify these complications early and adequately managed through timely ANC visits. Late attendance of first antenatal visit is a common problem in developing countries making it difficult to achieve the targeted maternal mortality to a ratio below 70 per 100000 live births and newborn death to 12 per 1000 live birth by 2030. This study aimed at investigating determinants of first ANC visit among pregnant mothers attending antenatal clinic at Tenwek Hospital. The objectives for this study were; -to explore maternal individual reasons, to explore hospital factors and to investigate maternal cultural beliefs and practices that affect women's decision regarding the first antenatal visit. This was a qualitative study that utilized a phenomenological study design to understand the experiences of pregnant women in seeking ANC service. Homogeneous purposive sampling was used to sample mothers coming for initial antenatal care clinic during the current pregnancy. In-depth interviews were used to gather data from the participants. Braun and Clarke framework for thematic analysis was employed for the analysis of data to reach thematic saturation. From the study, it was notable that the results were in line with the objectives that were studied. The following themes were derived from the data: Economic reasons, hospital service provision, fear, cultural Factors and misconceptions about ANC by other women. The study participants seemed not to be well informed of the stage of pregnancy when the initial ANC visit should be made. This study recommends the need for hospital management to provide health education to mothers concerning the importance of ANC attendance and to organize strategies to prevent long queues at the hospital. Further, the community leaders should create awareness through administrative barazas and employ community-owned resource person strategy in following up expectant mothers in the community and motivating them to attend ANC. The community leaders and resource persons need to motivate pregnant women to attend ANC clinics.

Keywords: First Antenatal Care Visit, Antenatal Care Visit, Timing

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ABBREVIATIONS

ANC	Antenatal Clinic
CORPS	Community-Owned Resource Persons
HBM	Health Belief Model
KDHS	Kenya Demographic Health Survey
KEPH	Kenya Essential Package for Health
LMIC	Low and Middle-Income Countries
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
NHIF	National Hospital Insurance Fund
NHSSP	National Health Sector Strategic Plan
PNC	Postnatal Clinic
SDG	Sustainable Development Goals
TBAs	Traditional Birth Attendants
WHO	World Health Organization

OPERATIONAL DEFINITION OF KEY TERMS

Antenatal care clinic (ANC): This is care provided by skilled health-care professionals to pregnant women and adolescent girls in ensuring the best health conditions for both mother and baby during pregnancy. Before 2018 only 4 ANC visits were recommended. Currently WHO recommends a total of 8 ANC visits?

First Antenatal Care Visit: A visit to the Ante-natal clinic for the first time during pregnancy**.**

Factors Influencing ANC visits: In this study, this shall refer to the motivators that influence ANC visits among pregnant mothers in Tenwek hospital. Specifically, in this study, the focus is directed to the maternal individual reasons, hospital factors and maternal cultural beliefs and services

Maternal Individual Reasons: In this study, this shall refer to the personal reasons that motivate a pregnant mother to seek ANC services from Tenwek Hospital.

Hospital Factors: In this study, this shall refer to the health facility-related factors that motivate a pregnant mother to seek ANC services from Tenwek Hospital.

Maternal Cultural Beliefs and Services: In this study, this shall refer to the cultural beliefs and services which motivate a pregnant mother to seek ANC services from Tenwek Hospital

Family Support: In this study this shall refer to psychosocial and financial support provided by family members to an expectant mother during her antenatal care period.

Linda Mama: public funded health scheme that will ensure that pregnant women and infants have access to quality A and affordable health services

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter entails the background of the study, problem statement, and purpose of the study, research objectives, research questions, justification, limitations and assumptions of the study.

1.2 Background of the Study

Antenatal care is the care given to and received by expectant mothers to safeguard the mother and the unborn. The provision of scheduled services at antenatal care clinic allows for primary prevention by identifying the expectant mothers who are at risk early. It enables health professionals to screen and diagnose pregnancy-related conditions and subsequently provide prompt and timely curative services followed by serial follow up. These interventions are meant to curb maternal and infant mortality. In summary, antenatal care is concerned with primordial, primary, secondary and tertiary intervention for the prevention of pregnancy-associated disorders (Ekabua et al, 2011).

Worldwide, maternal illnesses and deaths have continued to pose a major challenge, especially in developing countries (WHO, 2018). Yearly, 303,000 mothers die because of inadequate health services during the antenatal period, delivery and post-natal period. 99% of this mortality occurs in developing countries (WHO, 2015). In 2013, developing part of Africa recorded less than 50% coverage of early timely visit coverage which might have led to high maternal mortality ratios of 546/ 100000 live births and neonatal mortality rate of 29/1000 live births (Gitonga, 2017).The 2018 World health organization guidelines advocate for timely initiation of ANC visit to avert the possible pregnancy complication that every woman is at risk of.

Antenatal care is the most essential strategy to ensure a healthy and safe pregnancy. This culminates in good results for a healthy mother and fetus (Moller, Petzold, Chou & Say, 2017). World Health Organization (2018) recommends that a pregnant mother should initiate the first visit at less than twelve weeks gestation and an additional seven visits during her pregnancy. Early antenatal care is a critical opportunity for health providers to deliver supportive care and information to pregnant women in the first trimester. The antenatal card is given to every expectant mother of whom it forms comprehensive records of events during the antenatal and postnatal period. It contains in-print information that expectant mothers read or are read for and made understood all about danger signs in pregnancy.

This is filled whenever the woman goes for an ANC visit. It contains all the information regarding pregnancy and especially danger signs of pregnancy which they are usually advised to report to the health care worker. After the first visit, the woman is booked for subsequent ANC visits to identify any complications and get early management. The first visit is important for the verification of gestational age and the expected date of delivery. The history gathered includes any complication encountered in the past, a medical problem, familial and genetic disorders, use of medication, any allergies, use of an addictive substance like tobacco or alcohol and any other substance, family and social circumstance including any psychiatric illness or previous operations (Nisar et al., 2013). It is evident from these studies that antenatal care is an important aspect of pregnancy care. However, most women delay presentation to antenatal care due to unidentified reasons which this study seeks to establish.

A full physical examination is conducted including starting with the general examination which entails checking for pallor, cyanosis, dehydration, edema, finger clubbing and lymphadenopathy. Vital signs are taken during the general examination which includes

temperature, pulse rate, blood pressure and respiratory rate. However anthropometric measurements are performed which include; weight, height and body mass index. A focused systemic physical examination is then carried out paying attention to privacy. Finally, screening for diseases such as HIV, syphilis, anaemia and urinary tract infections are performed as well. Subsequently, immunization and supplementation of necessary supplements are given(Moller et al., 2017). This will support the recommendation by the World Health Organization that expectant mothers should initiate ANC clinic within twelve weeks of pregnancy. The subsequent visits are scheduled at a particular age of pregnancy in terms of weeks as follows; at 20, 26, 30, 34, 36, 38- and 40-weeks' gestation or at the initiation of labour. The number of ANC visits for an ensured adequate exposure to skilled health care provider should be at least eight. These several contacts are aimed at enhancing women's knowledge of the required care and reducing perinatal death. In addition to antenatal care given to pregnant mothers, the place and mode of delivery is discussed with mothers (Ali et al. 2018). These studies show that antenatal care is very important for pregnant mothers. However, they do not indicate the various reasons why expectant mothers delay in presentation for antenatal care.

During each visit, mothers are grouped into two, high and low risk. This helps in prioritizing care. Risk factors which include anaemia, urinary tract infections, mental health conditions, hypertension, diabetes, obesity and other conditions like HIV on average account for 25% of all expectant mothers reporting for ANC clinic for the first visit. Timely ANC visit allows for such services to be offered adequately. According to research done in Ethiopia by Amtatachew, et al, in 2013, the WHO recommended schedule was not met because there was a high rate of late attendance of first antenatal visit which was a great problem throughout sub-Saharan Africa. However, pregnant mothers of older age, rural residents and those attended by health care workers as

opposed to those attended by midwives had greater odds of initiating ANC early (Guevara& Stubbs, 2017). These studies show the risk factors associated with the lack of presentation of pregnant mothers for ANC. However, they do not indicate the various reasons why mothers present late for antenatal clinics.

According to a report by WHO (2018), early ANC coverage is directly proportional to the maternal mortality rate as recorded globally using individual regions. The lower the number of ANC visits, the higher the maternal and neonatal mortality. Developing countries of Africa and Oceania suffer the cost of ANC coverage of less than 25% within the twelve weeks of pregnancy in 2013, and also had the highest ratio of maternal and neonatal deaths as well as the highest rates of stillbirths. Hence early antenatal care visits could potentially be linked with health outcomes for women and children (WHO, 2013). There is a considerably high record of incidences of unwanted pregnancies and mistiming of first ANC clinic visit in developing countries especially Sub-Saharan Africa. This finding is associated with higher maternal morbidity and mortality (Ochako et al., 2016). The complications incurred during pregnancy, delivery and postnatal period confer a lifetime risk of complications like obstructed labour, postpartum haemorrhages or hypertensive disease of pregnancy. This is higher in Sub-Saharan Africa than in the rest of the world, (Rurangirwa, 2017). Pregnant mothers with unwanted or mistimed pregnancies may become unwilling to start ANC in the hope that the pregnancy will vanish or in attempts to hide it (Amo-Adjei et al., 2016). These studies highlight the importance of ANC visits for expectant mothers and some of the issues that pregnant mothers face which may lead to delays in seeking antenatal care. However, these studies do not show the exact reasons which contribute towards the delay in presentation of women for their first ANC visit.

A study conducted in Kenya, Malawi and Ghana, found that women's timing of ANC initiation were 15%, 12% and 55% respectively. 40% and 9% of pregnant women initiated the first ANC visit at more than 6 months gestation in Kenya and Ghana respectively. This was due to the influence of reproductive concerns and pregnancy uncertainties (Pell et al., 2013). According to Ochako et al., 2016 women living in countryside areas of Kenya tend to miss attending ANC as compared to those living in upcountry. This correlates to the study done by (Kwambai et al., 2013) in western Kenya of where 90% of pregnant mothers attended at least one ANC visit. Kenya demographic health survey (KDHS, 2014) reports that the frequencies of antenatal care visits, pregnancy acceptance influence the timing of the first antenatal care visit. This is true with the research done by Ochako et al. (2016), which found out those women who conceived un-unexpectedly, presented for ANC late. These studies indicate the intentional delay by some women in presentation for ANC, they do not, however, indicate the specific reasons resulting in the delay in presentation for ANC.

Sustainable Development Goal number 3 (SDG, 2017) aim at reducing pregnancy-related death to less than 70 maternal death per 100000 live birth and timely ANC care that aims to reduce newborn death to 12 per 1000 live birth by 2030 (Gitonga et al., 2017). Additionally, worldwide health strategic organization like Women's Children's Health 2016-2030 aims at ending preventable maternal and every newborn mortality "an action plan to end preventable death" (Moller et al., 2017).The high maternal and neonatal mortality in Kenya remains a challenge (KHDS, 2014) and are attributed to the gestational period together with inadequacy or inaccessibility of available ANC services. These compromises the quality of antenatal services provided in a health facility (WHO, 2018). A study was done by Odwory et al. (2017) in Longisa county referral hospital showed that mothers and neonates who receive prenatal care during the first trimester

have a lower risk of complications. The likelihood of dying during the prenatal, perinatal and postnatal period corresponds to the ANC attendance. Arunda and his colleagues found out that there is a fourfold greater odds ratio of dying in the individual mothers who missed ANC as opposed to the ones who attended (Arunda et al., 2017). The aforementioned studies suggest how missing out on ANC visits relates to death among expectant mothers. These studies do not show the reasons leading to the delay in the presentation by the women for their first ANC visit.

According to Bomet County, health indicators report 2017 from April to September showed that 25% to 30% of pregnant women attended first ANC at <_20weeks gestation (Maina et al., 2017). According to Tenwek Hospital Statistics (2018), approximately 8800 mothers attended ANC clinic from beginning January to the end of December and only 50% of the pregnant mothers complete at least four ANC visits (Tenwek Hospital, 2018). Eighty per cent of pregnant mother started ANC at 26-28 weeks gestation of which 20% attended during the first-trimester majority being high-risk pregnancies and attended more frequently than the general (Tenwek Hospital, 2018). It is evident from these studies in Tenwek hospital that most of the women sought ANC after 20 weeks of gestation. Generally, this shows that there is an evident delay in presentation for the first ANC visit.

From the previous studies done on the same topic, the causes of poor timing were noted. Amongst these are: lack of knowledge on the significance of good timing of the initial ANC visit, poverty and also lack of financial support. However, most of the poor ANC visit attendances resulted in the death and morbid condition in the expectant mother and neonates. Given the low ANC attendance compared to the recommended by the World Health Organization, this study sought to understand possible reasons why mothers prefer to start ANC at a given duration of pregnancy. This study, therefore, seeks to

explore more reasons that determine the timing of the first ANC visit among expectant mothers attending ANC clinic at Tenwek hospital.

1.2 Statement of the Problem

Notable conditions such as hypertension and antepartum hemorrhage are the key causes of maternal death. Such conditions can be prevented through timely antenatal services. (Say et al., 2014). Generally, conditions such as malaria, HIV/AIDS, anemia and malnutrition tend to worsen during pregnancy causing considerable maternal and neonatal morbidity and mortality. Violence against woman and workplace hazards exposure than to be detrimental to pregnant women and their inborn causing morbidities and mortalities thereof (Lincetto et al., 2006) Antepartum stillbirths have several causes, comprising of TORCHES (commonly syphilis) and other childbirth complications. An unborn fetus is at risk of preterm delivery, intrauterine growth restriction (in case of multiple gestations), congenital abnormalities and fetal alcohol syndrome (selected alcoholic mothers) (Linette et al., 2006).

There are still a significant number of neonatal complications in Bomet County and at Tenwek hospital but the reasons for these complications are not clear. Most of the mothers who have experienced these problems did not start ANC as per the WHO recommended time. Delay in diagnosis and management of these conditions affect maternal morbidity and fetal outcomes as seen in a research done in Bomet County Longisa County hospital (Odwory et al., 2017). The solution to some of the neonatal complications can be solved by attending ANC in time by expectant mothers. It is for this reason that this study seeks to establish the determinants of presentation by pregnant mothers for their first ANC visits.

1.3 Objectives of the Study

1.3.1 General Objective

This study aims to explore the determinants of first antenatal care visit among pregnant mothers attending Tenwek Hospital, Bomet County, Kenya.

1.3.2 Specific Objectives

The following objectives guided this study:

i. To explore maternal individual reasons that determine the timing of the first antenatal visit.
ii. To explore hospital factors that may influence the timing of the first antenatal visit
iii. To investigate maternal cultural beliefs and practices that could be affecting when to make the first antenatal visit.

1.4 Justification of the Study

The timing of initiation of the first ANC visit is of paramount importance to ensure optimal health outcomes for pregnant mothers and their infants. The WHO recommends that expectant mothers initiate their first antenatal care visit within the first twelve weeks of pregnancy. Concerning the vision of ending preventable maternal and infants deaths, critical intervention is required to make sure that all expectant mothers start their initial ANC visit within the first 12 weeks of pregnancy hence receiving and utilizing the optimal care (Gitonga et al., 2017).

A study done in Ghana concluded that the ANC service utilization is influenced by accessibility, socio-demographic factors, knowledge and quality of the care services rendered (Akowuah et al., 2018). An understanding of the determinants that affect the initiation of first antenatal visit for women in Bomet County will lead to the provision of care to meet their needs. Therefore, it is essential to do research using a qualitative

method to make use of the findings regarding the determinant of the first ANC visit among pregnant mothers. The outcomes of this research could help decision-makers and other scholars to design some country/county specific strategies to improve the utilization of ANC.

1.5 Significance of the Study

This research is intended to ascertain and explore reasons which may have been missed in earlier studies. This study will identify ways on which pregnant mothers are made mindful of the significance of seeking antenatal services promptly. The strategies developed will hopefully promote the timely attendance of the first ANC visit thereby reducing maternal and infant mortality and morbidity. To realize SDG number 3, Buse and Hawkes (2015) recommend that maternal health care provider, policymakers and the ministry of health would be able to use the findings of this study to develop approaches that would educate mothers on the need for timely and consistent ANC visits. This will enable the allocation of funds for more research and support of this crucial program. The study findings will be published in reputable journals whereby the scientific knowledge will be shared and the researchers will utilize the articles as a basis for further research studies.

1.6 Limitations of the Study

This study was focusing on experiences, individual thoughts and perceptions of a particular community and the health care providers and this might not be generalizable to other regions. The main task was to convince the participants to share their views on delicate and discrete topics related to their personal life, considered to be forbidden in some cultures and especially to a male researcher. To address this, the researcher uses female research assistants who were from the same community and therefore familiar with the cultural beliefs.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to review relevant literature related to the research topic. It will focus on knowledge depicted by pregnant women concerning timely antenatal services, the socio-economic and cultural factors influencing the timing of ANC visit by the participants.

2.2 Theoretical Framework

This study is based on a theoretical framework model which aims at promoting health practices especially seeking health services as required it is adapted from Pender (2009). The model describes individual pregnant women characteristic for example her experiences and prior behaviour towards seeking health services which affect the current reception of antenatal services. The model identifies the factors that can be modified to suit health services provision and access. The utilization of antenatal care services is determined by individual characteristics based on education level, gender, age, marital status and parity. Factors that attract pregnant women to perceived benefit from ANC services might encourage women to seek ANC services (Pender, 2009).

The obstacles to the utilization of ANC service by pregnant women are well-identified in the model such as the health workers' reluctance to render services, absence of reaching out for such services and accepting available services could influence the decision not to utilize the ANC services. Pregnancy is a time-based period when pregnant women can get an opportunity to reach out for antenatal services and help modify women risk behaviours and promote the utilization of ANC services. However, there are conflicting demands and are those peculiar behaviours over which individuals have low control because there are environmental contingencies such as work or family care

responsibilities. The HPM, as a conceptual framework, attempts to explore why some people take certain actions to prevent illness, while others do not take such measures. The framework was seen as useful in identifying those pregnant women who were susceptible to several inhibiting factors and unlikely to initiate early initial ANC and complete ANC visits (Pender, 2009).

2.3 Emperical Review

Services received by pregnant women are termed as medical management aimed at making pregnancy, labour and delivery safe. It is concerned with providing preventive care through health talks, provision of preventive medications. However, it aimed at making an early diagnosis of pregnancy-associated conditions and subsequent relevant treatment. It also provides an opportunity for discussion between an expectant woman and a health care provider about health concerns during pregnancy, possible complications that may arise and delivery plan (Linette et al., 2006). An expectant mother should attend ANC timely as per recommendation by per world health organization such that the first visit should be at less than twelve weeks and additional seven visits during her pregnancy (WHO, 2018).

Antenatal care is a necessity for every woman who is pregnant. For good health for both pregnant women and unborn, the timing of ANC services especially the first visit is crucial. Antenatal services provided by trained and experienced health care workers is essential in monitoring pregnant women and the wellbeing of the fetus resulting in cutting down the number of mothers being sick and the risk of dying during pregnancy and postnatal period. Quality of ANC visit is measured by the health information and the total care received by the expectant mothers during the initial ANC and subsequent visits (Arunda et al., 2017).

2.3.1 Maternal Individual Reasons that Influence first Antenatal Care Attendance

According to the Lancet Global Health (2013), it was estimated that the global coverage of ANC visit was 58·6% with varying percentages in individual regions. Lancet Global Health (2016) reported that where women receive care that is not timely or sufficient or no care at all results in poor maternal health resulting in mortality and severe morbidity. Although there was a substantial decline ratio reported by WHO (2013), millennium development goal 5 was not achieved. This millennium development goal 5 aimed at lowering the death rate of pregnant and postnatal mothers by 75% by 2015. Worldwide, maternal sicknesses and death pose a major health challenge especially in countries where resources are limited. Inadequacy of antenatal care received by pregnant women due to either untimed services or complete absence resulted in 303,000 maternal mortalities as per WHOM (2015). Low resource countries experienced ninety-nine per cent of maternal mortality ratios which was also reported by WHO 2015. WHO recorded a less than one per cent decline in low and middle-income countries? This could be attributed to poor timing and underutilization of ANC. Despite the good advancement report on ANC coverage by Moller et al, the limit required and recommendation by WHO on early ANC schedule has not been attained (Moller et al., 2017). These studies indicate the failure on the attainment of early ANC schedule by expectant mothers. However, they do not indicate the individual reasons that result determine the presentation by women for their first ANC.

The first trimester of pregnancy is a stage when the initiation of ANC visit is recommended by WHO (2015) especially in low resource countries. Early initiation of ANC visit allows room for more contact with the health care providers in reproductive health (Alkema et al., 2016). This goes along with the recent WHO ANC's model in 2018 which provides a standard and achievable antenatal visit schedule whereby the first

visit should be made during the first trimester subsequent two visits to be achieved during the second trimester and the rest five of the total eight visits should be done during the third trimester. This is aimed at addressing the continuity of timely and comprehensive care (WHO, 2018). However, a meta-analysis conducted by Downe et al. (2009) indicates that late pregnancy recognition, subsequent denial and acceptance influenced negatively initial access to ANC. Subsequently, the study done in South Africa identified pregnancy acceptance and individual understanding and need for antenatal care influence the timing of the antenatal visit. Therefore, awareness of the consequences of ANC care may enhance initial access to antenatal care. Moreover, a study that was done in Central Nepal (Pandey et al., 2014) showed that over 50% of expectant mothers failed to get ANC services. These studies show the failure of women in getting access to ANC services. They do not show the individual reasons that delay in presentation for their first ANC.

A study done in Australia pointed out that to succeed in implementing antenatal protocols, evaluating and monitoring of maternal, fetal and neonatal indicators should be the engineers. This will enhance timely ANC visit and subsequent antenatal care visit meeting the complete package of schedule specific and expected antenatal services at every visit. The timely antenatal care given by a trained and experienced health care worker matters more than the number of visits made during the entire pregnancy period as guided by the documented programs. However, the maternal and perinatal outcomes should evaluate the care received during pregnancy in a timely version (Vogel et al., 2013). This study focuses on the successful implementation of antenatal care in a healthcare facility. However, no specific reasons have been given in the determination of the first ANC visit by women by expectant mothers.

According to a study done in Ethiopia in 2017, there was evidence that multigravida mothers start ANC more early than primigravida mothers this was because of their experience on ANC (Get et al., 2017). The community may influence ANC care in one or another. There is no appreciation by the community that early initiation of ANC is necessary if a pregnant woman is to take full advantage of maternal health care. Priority action to implement the SDG acceleration framework was to raise awareness and educate the public by upscaling the implementation of the community health strategy (Bare et al., 2014). These studies indicate one of the reasons why some women may start their ANC visits early. Explorations of other reasons which may determine the presentation of women early for their ANC visits have not been explored.

A study done in Peru revealed that being married or cohabiting, attaining secondary and tertiary school education level, living in an urban environment and having had a previous miscarriage was associated with early initiation of ANC. Moore et al. (2017). Papua New Guinea, timely ANC visit is determined by the time taken to avail finances to meet transport expenditure and health facility charges. The transport expenditure is dictated by the distance from the residential area to the health facility (Andrew et al., 2014). A study done in Rwanda confirms that barriers to timely initiation of ANC were experienced with past deliveries, lack of social support from the spouse (not accompanying their wives to the clinic) and lack of financial power or medical insurance cover (Hagey et al., 2014). A recent study was done in Daresalaam by Mgata & Maluka (2019) shows that individual perceptions of antenatal care, fear of pregnancy disclosure and lack of spouse's escort were barriers to early ANC attendance may contribute to the delay in presentation for ANC by women. The aforementioned studies indicate few reasons which may determine the presentation of women for their ANC visits.

A systematic review of determinants of first ANC visit in Sub-Saharan by Okedo et al. (2019) identified social factors, financial status, living in towns, advanced age, having fewer children, earning a salary, having been wedded and believing in God as indicators of ANC attendance in timely version. Knowledge on the danger signs of pregnancy, attending ANC as required, being informed through available means such as mass media and having a positive attitude towards ANC services consumption made timely initiation of ANC during the first trimester feasible. Unwanted pregnancies, past poor pregnancy outcome, lack of individual human right, lack of medical cover and expensive services impacted the service utilization negatively.

The aforementioned studies indicate some of the reasons which may contribute towards delay and in some cases, failure to attend ANC services. However, they do not indicate the specific individual reasons that lead the pregnant women to delay in seeking ANC services.

2.3.2 Hospital Factors Influencing the Timing of the First Antenatal Visit

Universal implementation of strategies aimed at encouraging antenatal attendance through the provision of quality services at a health facility by well trained, motivated and skilled health worker. People will seek such services in that particular health facility. According to a study which was done in Saudi Arabia (2020) health care system is a key factor that influences ANC attendance positively if the pregnant women have a right perception towards staff communication during clinic visit leading to avoidance of delay in initiating avoidance in initiating ANC visit. This is because half of the pregnant women who overlooked or differed schedule accused the institution of health due to uncoordinated clinic services and long queues Alanazy et al. (2020). However, specific drawbacks to the health-seeking behaviours by pregnant women according to a study that was done in South Africa are mainly health facility staff showing negative attitude

towards the attendants of ANC (Jinga et al, 2019). These studies indicate how the perception of expectant mothers towards hospital staff communication may influence the attendance of pregnant women for ANC. These studies do not indicate the hospital factors that may determine the timeliness in the presentation of expectant mothers for their ANC services.

This is in line with the study that was done in Southern Sudan findings which concluded that demotivating factors towards the provision of services are the absence of continuous medical education courses for staff, low salaries and nonexistence incentives. Furthermore, the absence of medical equipment's and utilities such as water and electricity were identified as barriers to service provision. (Mugo, Dibley, Damundu & Alam, 2018). On the other hand, findings from a study done in Malawi revealed that the timing of antenatal care among urban Malawian mothers was associated with hospital inefficiencies and conflicting ANC promotion messages. (Manda, Sealy & Roberts 2017). From the previous study done by Turyasiima et al (2014), they maintain regular starting time at the MCH clinic, to and fro walking distance to the clinic, knowledge on ANC enrollment were found to influence the first ANC visit. In a previous study by KDHS (2014), ninety-two per cent of pregnant mothers received ANC from a trained health care practitioner in Kenya. Many of the women visited the clinics to obtain a card for future health visits for the mother and the baby. As for the timing of the visits, only 15% of pregnant mothers met the WHO recommended ANC initiation time during the first trimester of pregnancy (KDHS 2014). These studies show how hospital infrastructure affects service provision as well as poor compliance of timing of ANC visits by most mothers. However, there is little indication of the exact hospital factors which influence the timing of presentation of expectant mothers for their first ANC visit.

According to a study done in western Kenya barriers to initiating ANC were attributed to the poor approach of ANC health care workers, long queues, serological test (HIV), and cost implications. However initiating ANC on time was also seen to have an advantage like examining the mother and the unborn, obtaining medication/injection and attaining recommended preventive gear like bed net, as well as getting an ANC card Mason et al. (2015). The timing of ANC service consumption by pregnant women living in both urban and rural places of Malindi and Magarini depict still low attendance rate compared to standard due to health facility inefficiencies, distance walking to the health facility 1-2hr, high cost of laboratory tests during the first ANC visits, unavailability of drugs, negative attitude of health care workers Chorongo et al. (2016). These studies indicate how poor service provisions by health workers as well as other occurrences within hospital facilities may affect the presentation of women for ANC services at hospital facilities.

KDHS (2014) shows that while 96% of women report only once to ANC clinic with a trained healthcare professional, of which 58% of pregnant women make a minimum of 4 ANC visits during their pregnancy with a rural-urban differential of 51% for rural and 68% for urban pregnant women (Arunda et al., 2014). Fifty-eight per cent of pregnant mothers who had 4 or more ANC visit for their previous deliveries. A range of 18% to 73% of pregnant women were those who attended 4 or more ANC visit in West Pokot County to Nairobi County respectively of which less than 50% of pregnant women from (Garissa, Wajir, Mandera, Meru, Bomet, Marsabit, Turkana, West Pokot, Trans-Nzoia, Elgeyo Marakwet, Narok Bungoma, and Kakamega met the recommended number of visits (KDHS-2014).

The prospective population-based observational study done in Argentina, Guatemala, India, Kenya, Pakistan and Zambia, which deals with ANC accessibility and service

provision reported ninety-six per cent of pregnant women who attended ANC once. India yielded the greatest number of pregnant women who started ANC visit within the first twelve weeks of pregnancy (Bucher et al., 2015). Ochako and his colleagues found out in their study that pregnant women who attended ANC clinic more frequently were most likely to start ANC clinic on a timely version compared to those who attended fewer visits (Ochako et al., 2016).

According to the Kenya Health Strategic Plan, the primary goal of (NHSSP II) is to make sure that there is an equal distribution of health resources per health levels from level six to level one. Therefore contribution towards harmonization of health and reverses the drawback in the impact and health outcome effects of national health sector deliberate plan. The community-based health care system together with level 1 hospital form the basis of health service provision leading to ownership and utilization of health services. The communities therefore will receive the required health information thereby developing skills. This enhances healthy lifestyles.

The Community Health Workers (CHWs) though thought as the lowest carder in health service delivery, play an important part in disseminating health messages and act as a connection between the health facility and the members of the community, they however encourage the communities to uphold the required and prescribed health practices actively aimed at improving their health (Kaseje et al., 2015). The community-owned person is defined as an individual residing in a particular community who are trusted and recognized/consulted in matters to do with human health in such locality. The CORPs comprise community health workers. They have a role of identifying pregnant mothers and subsequently refer them to the health facility nearby encouraging them to make use of ANC, delivery and postnatal services offered. They however volunteer to accompany pregnant mothers with a special condition to a health facility (Kerber et al., 2007). The

key strategies proposed to accelerate attainment of SDG-3 include: strengthening community-based maternal and newborn health care approach (Sorre et al., 2016).

2.3.3 Socio-Cultural and Economic Factors that Influence first ANC Visit

According to the study research done by Finlayson et al., (2013), it was found that enabling factors for timely ANC services as economic stability, being well educated, having a low parity, being a spouse and earning a salary but even with the availability of antenatal services, the individual pregnant with poor background and low level of education, living in rural places were more prone to mistiming of ANC services. Both pregnant women together with their spouse with little education influenced access to antenatal services negatively. From the same study, pregnant women living at a far distant place from the health facility, together with high parity were identified as individual failing to access antenatal care. Social, family factors, community context and beliefs were other factors found to influence antenatal care attendance either positively or negatively. Evidently in a study that was done in South Africa, spouses with high education enabled their wives to attend the timely antenatal visit. The marital status was a factor in a timely ANC visit. The pregnant mothers who were married could initiate ANC visit on time as compared to unmarried women (Muhwava, Morojele & London, 2016).

In the study done in Europe, the participants (pregnant women) who were found to be born in a particular area belonging to a specific ethnic group and were unable to speak English as well as living in a temporary accommodation tended to mistimed antenatal services (Cresswell et al.,2013). According to research findings in Malawi, it was believed that accepted that the pregnant women should wait for the husband initiative advice to start their first ANC visit. However fear of witchcraft shown to make pregnant women hide pregnancy during the early months and a very important stage of pregnancy

(Chancy et al., 2018). Also, a study done in Congo revealed that women were afraid to announce pregnancy status and to start ANC for being afraid of witchcraft that can terminate pregnancy prematurely (Nib et al., 2016).

Women play a vital role in taking care of the family which enhances the responsibility of costing the process of accessing ANC care. A disparity exists among women on how they value ANC care as a source of their health and child wellbeing, resulting in the level of making use of available ANC services. Pregnant mothers consider the wellbeing of their inborn as the sole reason for seeking ANC rather than their health. Decision making concerning the health of pregnant women is primarily done by older women as opposed to younger women. Unfortunately, the older women being traditionally bound may not be in a position to utilize the modernized way of health whilst the young women find the modernized health services fashionable (Gabryschet al., 2012). In some cultures, food taboos are practised during pregnancy whereby women are advised against eating certain proteins. This is contrary to what the pregnant mothers are advised in the clinic by health care workers to promote special foods and rest for pregnant women (Centenary, et al., 2010).

Reproduction is very essential in many parts of Africa and the women take full charge when it comes to the decision on getting pregnant. Maternal care is dependable on mother since the male spouse and other family members play a considerable small part (WHO, 2015). In the study done in Nigeria. Men at most make decision in antenatal care given to the spouse and even in emergency cases. Regardless of the religion men take the responsibility of making the decision on care (Oxaal & Baden, 2012). Being married have effect on accessing health service. However, a recent study done in Tanzania states those men most of the time although limited to some places facilitate and encourage women to seek health care services. They make decision on when the pregnant women

should seek care in a given health facility. However, they arrange for transport as well as taking their spouses to a health facility in emergency cases. They purchase supplies, Talk on behalf of women and identify and relay women complains appropriately (Greenspan et al., 2019).

According to WHO (2010), cited by Chaibva (2012) avers that the lack of financial and social support from the guardian, retard health-seeking behaviours from single pregnant women were barriers to timely ANC services. Adolescents' pregnant girls being young may not make good and prober and proper decision on their own in seeking ANC. Influential members of the family decide for pregnant women regarding initiation of ANC persuading pregnant women to agree on the decision made on their behalf (WHO, 2012). The same factors emerged in determining barriers to ANC in western world which pointed out that the issues for women who remained marginalized regardless of where comes from are the same (Finlayson et al., 2013).

The literature review above identifies multiple socio-demographic, reproductive and access related factors which affect the timing and the utilization of antenatal care among pregnant women in different countries. Several studies conducted in different countries and different counties have shown that factors like maternal age, number of living children, education, socioeconomic status, previous bad obstetrical history, support from a spouse, quality of care and distance from health care facility are significantly associated with the use of antenatal care. The findings of this research intend to bridge the gap in knowledge regarding early ANC timing by mothers attending ANC clinic in Tenwek Hospital and could be used by policymakers and other researchers to come up with design strategies that are county and country based to improve the utilization of antenatal care.

2.4 Conceptual Framework of the Study

Figure 1 below, illustrates the variables identified in this study to address factors that could influence the pregnant women utilization of ANC services in Tenwek hospital. The variables that affected attendance for the first ANC visit were individual factors which were determined by perceived barriers and perceived benefits. Other factors that affected ANC visit for the first time were situational factors like cultural beliefs and hospital factors. This conceptual framework was adapted from Pender health promotion theory.

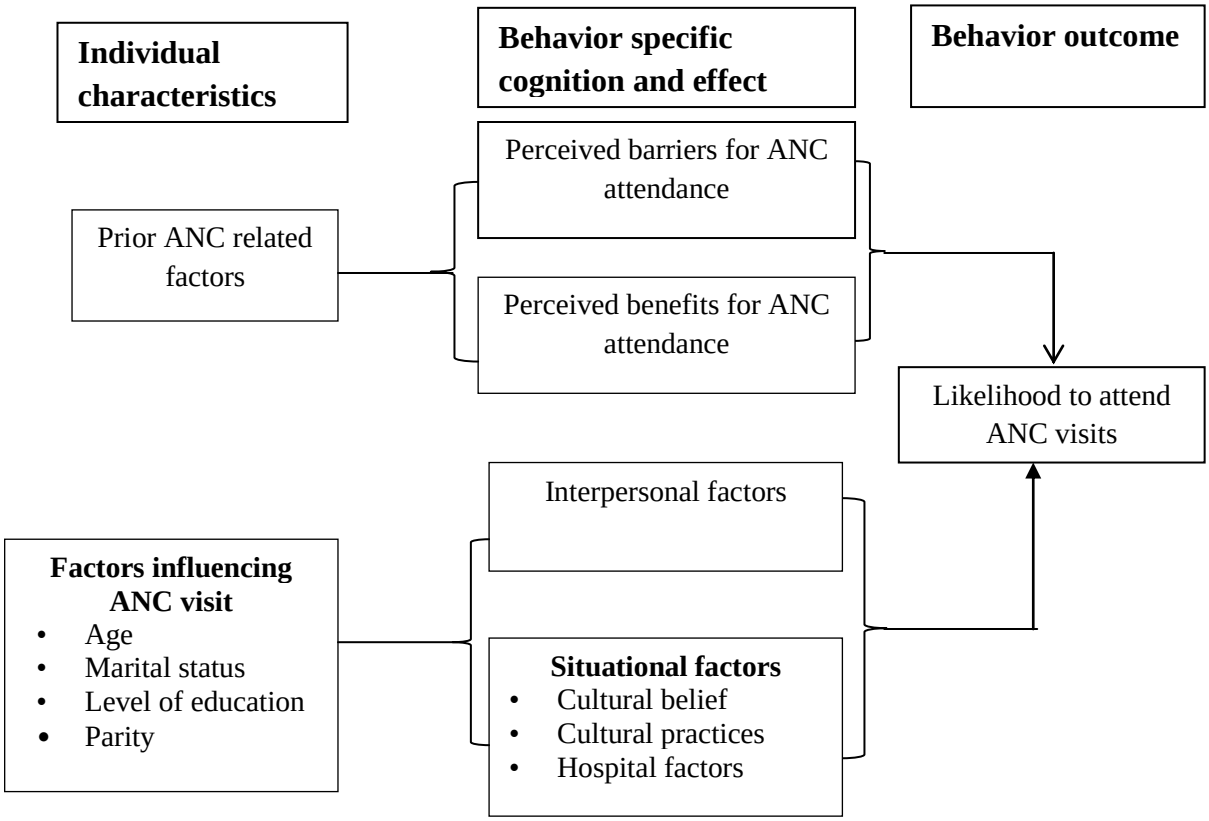

Figure 1: Conceptual Framework

Source Pender (2009)

2.5 Research Gaps

A lot is known about the importance of ANC visit but the reasons for not coming for first ANC visit in the first trimester is inadequate further more most of the research that have been done are quantitative studies which analysed the numbers and did not look at the individual reason for mothers coming for ANC visit at a given time.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter covers the methodology of the study. It contains the research design, location of the study, the population of the study, sampling procedure and sample size, instrumentation, data collection procedure, data analysis, and ethical consideration.

3.2 Research Design

This is a qualitative study that utilized phenomenological study design to explore deeply the determinants of first antenatal care visit among expectant mothers in Bomet County.

3.3 Study Setting

The study was conducted in Tenwek Teaching and Referral Hospital in Bomet County. Tenwek Hospital is a non-profit making Christian Hospital under the ministry of the Africa Gospel Church. Bomet has a population of 724,186 (KBS Census, 2009). The majority of the population is dependent on farming economically. Tenwek hospital is located in Bomet County, Bomet Central constituency, with a bed capacity of more than 300. Tenwek hospital was chosen due to its geographical location being at the centre of Bomet County and it serves a majority of ANC mothers in the County yearly.

3.4 Study Population

The participants were all pregnant women of reproductive age presenting to Tenwek hospital for their first ANC care during the study period. Tenwek hospital servesan estimate of 8800 pregnant mothers yearly in the Maternal and Child Health Clinic.

3.5 Sampling Procedure and Sample Size Determination

3.5.1 Sampling Technique

Tenwek Hospital was purposely selected since it serves a majority of women coming for ANC in Bomet County. This is despite their social status because the cost of ANC does not differ much from the government facilities. The participants who met the inclusion criteria were consecutively recruited as they presented for their ANC visit. This was done until the saturation of information was achieved.

3.5.2 Sample Size

Women seeking ANC care in Tenwek Hospital for the first time and who had not attended elsewhere for care during the current pregnancy were sampled. The study participants who met the inclusion criteria were consecutively interviewed until saturation of information achieved. By the 12^{th} interview, saturation had been achieved, but up to 16 participants were interviewed just in case any new information could come up. This sample size determination was used based on a meta-analysis by (Vasileiou, Barnett, Thorpe & Young, 2018) that suggests that by that number often saturation is usually achieved.

Inclusion criteria

i. All pregnant mothers coming for their first ANC visit.
ii. All the mothers who could speak English, Kiswahili or Kipsigis

Exclusion criteria

i. Pregnant mothers who had attended ANC elsewhere or coming for a subsequent visit
ii. Those who were critically ill
iii. Mothers who were in labour.

3.5.3 Data Collection Instrument

The questions in the interview guide were developed using the conceptual framework as a guiding tool. They sought to explain the barriers, benefits and cultural beliefs affecting the first ANC visit. Aspects outlined in the conceptual framework were broken down to possible questions that were then refined continually to simplify the language. The goal here was to tap into experiences these women go through during antenatal care visit. The questions were then pretested before the main study. The interview guide can be found in appendix III

3.6 Data Collection Procedure

Once the permit from Kabarak University Institutional Research and Ethics Committee (IREC) and NACOSTI was granted, the researcher liaised with two Maternal Child Health nurses who were the research assistants. The research assistants were trained by the principal investigator to familiarize themselves with the objectives and purpose of the study. They were also trained to identify those mothers who met the inclusion criteria. The mothers who met the inclusion criteria were presented with consent and the full scope of the study was explained to them. Those who consented were then referred to the principal investigator for the interviews. The interviews were set up in one of the counselling rooms in MCH and the researcher together with a trained female research assistant administered the interview guide. This was done at the end of the ANC visit so that the participants' care was not delayed. The principal investigator together with one female research assistant conducted the interviews and this was to ensure that the participant was comfortable.

A pretested interview guide was used to collect data. The interview guide did not have any respondent names or identifiers that could make it easy to trace the information back

to the respondent. Confidentiality and anonymity were ensured for each participant. A tape recorder was used to collect data as the interviews were ongoing. Each interview took approximately 45 minutes. The interviews were held during working hours. The recorded data was kept safely by the principal investigator as transcription was done after each interview.

3.7 Data Analysis

Data analysis was performed using the open coding method. This was initially done by two people, the principal investigator being one of them. This was according to a coding process suggested by Johnny Saldana (2009).

The audio-taped information was transcribed verbatim and then the information in Kiswahili and Kipsigis was then translated to English. A second transcriber was involved to ensure that the correct translation had been made by the first transcriber. The two people (first and second transcriber) looked at the transcribed data independently and analyzed it independently. This was done by reading and re-reading then codes were generated.

The codes were then arranged in categories with similar subthemes which then generated the emerging themes. After this process was done, the two people came together to compare if the themes were similar then they merged the recurring themes. The recurring themes then were assigned meanings depending on the theory that was brought up as to why women presented for their first ANC. This was to ensure the trustworthiness of the final results. After this process was complete, the principal investigator wrote the final report on the findings.

3.8 Ethical Considerations

Approval from the institute of postgraduate studies was sought before data collection and ethical approval from the Kabarak University Ethics and Research Board (IREC), NACOSTI and Tenwek Mission Hospital this was to ensure that the study being conducted was not harmful to the respondents and adheres to all the regulations. Written informed consent (see appendix 1) was obtained from participants to ensure that the respondents had a clear understanding of the nature of the study and were willing to take part in the study without coercion; rather they were participating by their own free will. Confidentiality and anonymity were observed at all levels from data collection throughout the entire study by using patient identifiers instead of the name of the participants. Interviews were conducted in one of the counselling rooms. Respect and freedom of thought and action were ensured throughout the interview process. If participants decided, for any reasons, to withdraw at any point from the study, they had that right. Refusal to participate or withdrawal from any level of participation did not affect care this was made known to the participants before the interview begun.

The researcher organized counselling services for any of the respondents who experienced psychological problems, or as a result of remembering hard times in the past relating to their condition. The qualitative data that was gathered was kept confidential by observing the anonymity of the respondents and adopting pseudonyms for the respondents who provided the information. Names or any identifying information of the participants on the collected data records were removed. The tape recorders have been locked in a safe place with key and lock and the key will be kept by the researcher and no unauthorized persons will be allowed to access the recorders.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter highlights the study findings and discussion to explain findings on. Maternal individual reasons that determine the timing of the first antenatal visit. To explore hospital factors that influence the timing of the first antenatal visit and to investigate maternal cultural beliefs and practices that affect when to make the first antenatal visit.

4.1 Socio-Demographic Information of the Respondents

The respondents were between age 18-40 years, the majority (67%) falling between 18-28 years. Furthermore, the majority of the research participants were unemployed; represented by a frequency of 8 (50%), those formally employed were 4 (25%) participants and the remaining 4 (25%) were self-employed. Lastly, in terms of their educational level, the majority of the respondents had pursued their education to the high school level. This was represented by a high frequency of 8 (50%). The respondents who had attained primary school and college education levels were represented by 4(25%) and 4(25%) respectively. It is evident from the analysis that 80% of the respondents delayed in presentation for ANC due to various reasons as explained in the findings.

4.2 Results

Table 1: Showing Development of Final Categories, Themes and Overarching Concept

Category Developed	Themes	Overarching Concept
Financial incapability Lack of Insurance Cover	Economic reasons	
Service Provision at the Hospitals Hospital Infrastructure Tedious Hospital Processes	Hospital Service Provision	
Fear of processes, tests, Covid-19 pandemic	Fear	
Family/Spouse/ Peer Support Reliance on Herbal Treatment Community Beliefs, Superstitions and Taboos	Cultural Factors	
False notions about ANC	Misconceptions about ANC by women	Reasons determining first ANC visit by Pregnant Mothers

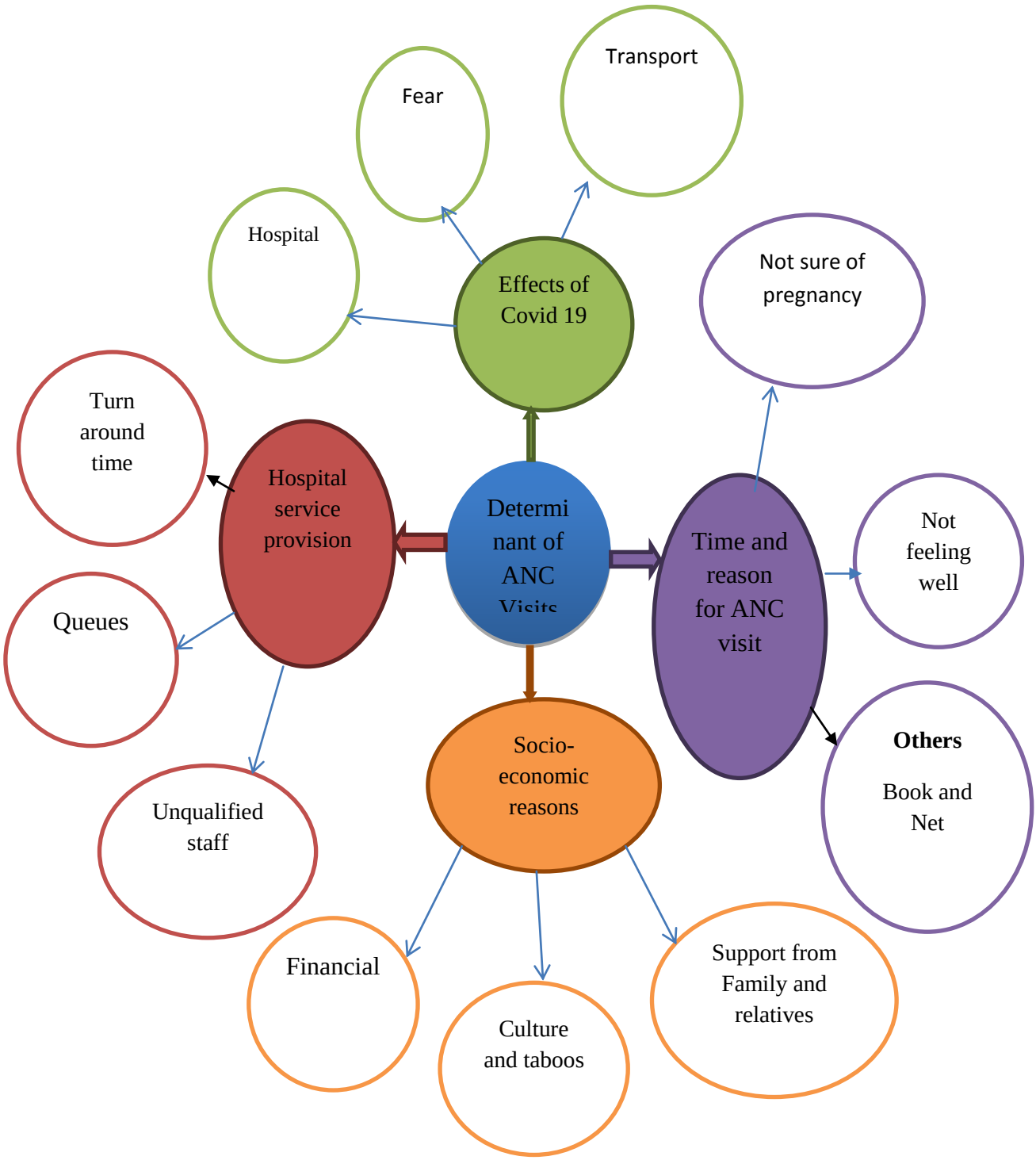

Figure 2: Diagrammatic Representation of the Categories and Themes

Kositany (2021)

4.2.1 Maternal Individual Reasons

4.2.1.1 Economic reasons

In this study it was evident that the participants, who were economically low, mistimed the ANC visit and only a few of the research participants were economically stable. Those who had insurance cover enabled them to time ANC services. For instance two participants said,

> "*The cost of several test and the test like HIV, syphilis and also the ……..*" **002**

> "*And sometimes also money is an issue you go through a lot there is lab and drugs and may be you don't have money……*"**010**

> "*money … some tests are expensive especially when you don't have NHIF or AON……*" **013**

This shows that although some aspects of ANC are covered by the government, lab tests are still a cost issue to some of the women attending ANC care. Those without insurance were most affected as they needed to pay out of pocket for the lab services.

4.2.1.2 Fear

Most participants expressed fear of attending ANC because they would be tested for HIV and the fact that they could contract COVID-19 either from the hospital or on their way to the hospital. For example, some participants said;

> "*Travelling with matatu now we have corona I don't know how safe I am now I am pregnant……*"**011**

> *"Nothing specific. But with this corona it is difficult to come to the hospital means of transport and also the hospital is not safe……."* **013**

> *"HIV status and if you don't know or suspicious……."***005**

Another source of fear was prior experiences with previous pregnancies. Like this participants noted that;

To speak the truth, I was not intending to be pregnant I had two miscarriages in 2016 and 2018 and I think it was because of mismanagement at the health centre. I thought of coming earlier to this hospital at least not to have similar experiences. …….." **002**

In this study, it was evident that fear of covid 19, previous bad pregnancy outcome and HIV test result influenced the timing of the first ANC visit negatively. MCH services are offered in the same hospital where covid 19 victims could be found. Therefore some of the pregnant women who were included in my study waited for reassurance about the Covid 19 resulting in being late in the first ANC visit.

Prior bad pregnancy events instilled fear in some of the respondents making them attend ANC clinic on time, hence they received timely ANC services. The saying 'once beaten twice shy' is true in this situation. This impacted timing of ANC positively. HIV disease is a pandemic disease that is talked about day in day out and information that HIV is tested for every pregnant woman during ANC clinic negatively impacted the timing of the first ANC visit.

4.2.1.3 Misconceptions about ANC

Some participants noted that they did not see the importance of attending ANC when women at home still gave birth without ANC care. Some even noted that they would not attend ANC unless they were unwell. For example, two participants said that;

"*A good number still give birth at home and they find as if it is expensive and some say that women use to give birth even without attending clinic*"……...**002**

"I think there is no need starting clinic because i use not to attend unless i am not feeling well. Essentially it is because of not knowing the right time"……..… **009**

"*They usually come when they feel like especially when they don't any problems with the pregnancy and if they have been well all along." ……..**011***

Other participants said that they only came toward the end of their pregnancies to collects ANC booklets and get a mosquito net and not because of the other services. This may be due to lack of education. For example some participants said that;

> *"I was coming for to clinic, I also wanted to collect the book because when you go to the hospital to deliver nurses will always ask for the book"…….* ***010***
>
> "*They come because they need a book before you go to deliver otherwise sisters in the maternity, they will not be happy about you."……* **011**
>
> "*I don't understand very well but I think there some drugs are given to increase the blood and also I will be given tetanus injection whether I come early or late, the other thing which I almost forgot is I will be given mosquito net"……* ***010***

4.2.2 Hospital factors affecting ANC care timing

In the hospital setting, services are categorized into general health care and specific problem-based services. In my study, the quality and availability of health services provided by a health facility were found to be one of the determinants of timely ANC visit. If the quality of services was high and the patients could have all the lab work and imaging done in the same setting, they were encouraged to attend the health facility for care. For instance some participants noted that;

> "*Not really it is only that the services offered here are good and you get the entire necessary test. I am satisfied with the services offered here as I had mentioned earlier that though I was attended elsewhere in my first pregnancy I was not satisfied that is why I decided to follow up here.*"…….. **001**
>
> *"We generally get all that is required here unlike if I go to a clinic in the village where no scanning would be done" ……..****004***
>
> ***"****Because I get almost all that I need here it a good facility and the staffs are also good" ……..****005***
>
> **"***I knew here they will do investigations and I will get the medication*",…… **007**

"I was encouraged by some of my colleagues to come here after we were discussing attending ANC and some encourage others said there were long queues here and sometimes it is overwhelming to stay here, but eventually they said you can get all you need here, in terms of drugs and investigations"……. ***003***

"Most people prefer coming here that's why I decided to come."…… ***006***

"*Staff are good and the hospital has a good reputation"……* ***007***

"*I was told by a friend this is my third pregnancy and last time I went to Longisa a friend told me Tenwek is the best that's why I came today*."…… **011**

The hospital processes also appear to be tedious because of the long queues witnessed by patients as they seek service provision in the hospitals. It is noted that long waiting hours prevented some participants from attending ANC care on time. For example, some participants said that;

"*It is has good services the only challenge is the long queues and sometimes long waiting hours"…….* **002**

*"The challenging thing here is time you spend on the queue." ……..****004***

*"Here at Tenwek you have long queues."……***006**

"*May be sometimes the line is too long you don't even go for lunch and that's why I prefer to come once or twice*."…… **010**

"*When I remember of the long queue I have to wake up in the morning"……* **012**

The other factor affecting timing of first ANC care visits was the qualifications of the attending health care providers. It was noted that at times, students attend to these mothers and the quality of care may be compromised. Therefore some of the participants were discouraged from attending ANC visits if they were going to be served by students anyway. For instance one partisan noted that;

"Sometimes you are seen by student and might not be knowing what to do which is discouraging"……. **013**

4.2.3 Cultural Factors Affecting Timing of First ANC Visit

Disparity between the cultures of obstetric health care services and service consumers is taken as a major issue in provision of ANC services. In this study, cultural factors have been manifested in the form of cultural beliefs, superstitions as well as preference for herbal treatment over hospital medicine. Some of the participants alluded to the fact that hospital delivery was expensive. Some of the participants opted to be attended at home during early stage of their pregnancies so as to maintain cultural norms and yet this is the right time for them to initiate clinic. They dislike hospital based obstetrics service because they believe that doing a vaginal examination is against their cultural believes. This retards the behaviour of seeking ANC services early. For instance one noted that;

> *"Women say in the village say they do the examination with fingers but me I have not seen anything and some women are worried to start ANC.*"…….. **011**

Furthermore, some participants alluded to the fact that herbal medicine when used would change the sex of the baby, prevent the baby from influence by evil spirits as well as protect the child from people with bad eyes. Some participants also alluded to the fact that it was not right for one to start ANC early because they believed in concealing the pregnancy away from the public so that the baby would prevent from people with evil intentions. For example, some women quoted that;

> *"If you visit some places or eat some food or do some other things may interfere with the baby"* ……**005**
>
> *"Trust we have on herbal medication. Even after delivery you are given some herbal and some to clean your baby to wash away any evil spirit but I have not been practicing the last time my mum in law came and gave my child some herbs"*……**008**

Further, some research participants believed that their mothers-in-law had a say on when to start ANC visits and some needed family support before making decisions when to start ANC. They however choose herbal medication as alternative medicine for safe mother and baby. Some reported that their mothers in law advised them against seeking care in the hospital because some people may look at them and their babies with bad eyes. It is culturally accepted to agree with mother in-laws opinions this affected ANC services.

For instance, some participants said that;

> "*Like what I told you if mothers in law are the same then they control the time to attend clinic*"……. **004**

These factors contributed greatly towards the delay in the presentation by pregnant mothers for their first ANC visit.

4.3 Discussion According to Objectives

Maternal Individual Reasons that Determine the Timing of the First Antenatal Visit.

4.3.1 Economic Reasons

According to this study, it was evident that women delayed in presenting for their first time at ANC because of financial reasons. Financial reasons not only made them lack fare to travel the long distances to the hospital for ANC but also to access and pay for ANC services at the hospitals. Further, the financial reasons also made some of them unable to pay for their NHIF subscription. Additionally, if there was any prescribed medication then most women would probably not afford to purchase the medication. This compares to studies in the literature that indicated that most women delay presenting for ANC care for the first time because of low socioeconomic status. Manyeh et al. (2020) infer that most of these women could not afford to pay for the ANC

services. Another study by Njiga et al. (2019) found out that the lack of transport and extra cash for emergency made most ladies avoid going for ANC. From this study, several of the research participants did not have an NHIF card. This, therefore, shows that lack of finances greatly affects the timing of the first ANC visit hence affecting care negatively. Despite the government offering free maternal and child services, ANC is not covered under the LINDA MAMA initiative.

4.3.2 Fear

Fear is defined as potent natural human emotion triggered by threatening events. In this study, it was noted that fear of being tested for HIV and STIs made some of these women come late for the first ANC care. Other women feared being stigmatized because of either being single mothers or underage mothers. Others were afraid because of information they had received from multi-gravida mothers. Fear in this study also manifested itself when pregnant mothers feared getting infected by the existing COVID-19 infection.

Njiga et al. (2019) attested that fear in expectant mothers affected their presentation to ANC as a result of various aspects which may defer from one individual to another. These factors are very comparable to what was found in this study. In this particular study, it is evident that fear affected the presentation of several patients to the ANC. Six patients in this study were affected by the fear associated with various aspects. These six participants alluded that the new mothers generally feared the unknown. Others feared the discovery of their HIV status as well as the presence of STI infections. This study is in line with a study done in Gambia where a large proportion of women in were not using antenatal care because of fear of HIV tests during pregnancy. This impacted the timing of ANC visit negatively and even the health of both mother and the baby (Yaya et al, 2020).

Infectious pandemics have changed the psyche of humanity. Pandemics propagate fear and change the health-seeking behaviour of the individual. The presence of Covid 19 in our environs and beyond has made most of the respondents mistime first ANC services. It took time for the respondents to get acquainted with the pandemic hence coming late to the clinic after reassuring interventions like putting on a mask to guard once against contracting the Covid 19 (Hossain et al, 2020).

4.3.3 Misconceptions about ANC

The US Department of Health and Human Sciences (2010) describes human health literacy as the degree of which humans are capable of obtaining, process and understand basic health information availed to them and make appropriate decisions. It is therefore evident that persons with limited literacy may often misunderstand information and therefore misinterpret the same information to suit their interests.

A study done by Njiga et al. (2019) revealed that multi-gravida mothers purposefully delayed ANC for themselves because they often believed that they had more experience in handling their pregnancy. This infers that those who did not present for ANC on time did not understand the benefits of ANC to their pregnancy. It is evident in this study that some mothers only presented for ANC when they fell ill or had experienced some pain or even a fall. Some expectant women never presented for ANC if they felt generally well during the pregnancy. Thus, it is evident from the results and in comparison to the cited studies that misconceptions about ANC affected mothers' presentation for ANC at Tenwek Hospital. Hence, the majority would present late for their first ANC.

Additionally, findings in this study suggested that some respondents perceived ANC as unnecessary as evidenced by their responses. Some women believed that ANC was only for those who felt unwell during their pregnancy. Some women believed that ANC visits

were initiated to give women incentives like mosquito nets and ANC booklets. Some women even attested to the fact that they went to hospital to please the nurses and doctors so that during the time of delivery, the process would be friendly. Moreover, some pregnant women believed that delivery in the hospitals was expensive and the drugs given at the hospital weaken the baby. Turyasiima et al. (2014).

These misconceptions appeared to influence the pregnant women's presentation to ANC; hence, delayed presentation for ANC to hospital.

4.3.4 Hospital Factors Affecting First ANC Visit

Customer satisfaction is the most important aspect of service provision of services to clients. In this study, service provision has been assessed in terms of the medical staff competency and attitudes as perceived by the patients, patient communication, and availability of drugs as well as long queues witnessed by patients as they report to the facility for their ANC visits. Njiga et al. (2019) noted that patients often are affected by the attitudes of the medical staff in the hospital facility. In this study, it is evident that most of the participants alluded to the fact that they were satisfied with the services offered at the hospital. They also attested that the doctors were competent and served them well. Additionally, they loved the hospital for their ANC care because the medical staffs were friendly. Further, the hospital was well stocked in terms of the availability of drugs. Despite the facility being well-staffed and equipped, one of the barriers to coming for the first ANC visit was the long queues that discouraged these mothers. Additionally, the pregnant mothers also perceived most processes were tedious and even complicated. Such processes seemed to create a culture of reluctance in terms of their presentation to ANC. This can be improved from the facility side where the facility should ensure that mothers coming are appropriately guided through the process with ease.

4.3.5 Cultural Factors Affecting Presentation for First ANC Care

Culture is a pattern of ideology, customary and behavioural entity that is shared by a certain group of people or society. It is constantly dynamic (Chelikani, et al., 2016). The timing of the first ANC visit is affected by different cultural beliefs and therefore cultural factors should be put into account in the planning and delivery of ANC services to effectively promote service uptake to reduce maternal and fetal mortality (Gabryschet al.,2012). In some cultures, food taboos are practised during pregnancy whereby women are advised against eating certain proteins. This is contrary to what the pregnant mothers are advised in the clinic by health care workers to promote special foods and rest for pregnant women. (Centenary, et al., 2010).

In this study, it is evident that cultural beliefs influenced some participant's presentation to the first ANC care. The cultural practices misled patients from fully embracing the importance of attending ANC. In this study, negative influences from other multiparous women on the benefits of ANC affected the timing of ANC attendance. Some of these negative cultural influences were like; some women delivered just fine without ANC care, hospital medication was bad for their pregnancy hence herbs were better, the fact that every time one goes for ANC in hospital they would get a vaginal exam which was not good for the pregnancy and belief that generally ANC was not necessary. Despite a study done in Kenya by Njiga et al (2019) that found that most women who presented for ANC knew the benefits of ANC and therefore were eager to gain from the ANC clinics, this tends to differ from this study since the ideologies depicted by some of the respondents tend to allude that much needs to be done in terms of educating women in this community about the importance of ANC. Besides, the studies revealed that some mothers purposefully avoided ANC care because they relied on traditional herbalists for medical advice.

Some other beliefs, superstitions and cultural practices also contributed negatively to pregnant women's perception of ANC. Findings from this study showed that women believed that medicine given to women during ANC would affect the baby's development processes. Other women believed that presentation for ANC visit was not to be started early because jealousy people would know that they are pregnant yet they wanted to conceal the pregnancy first. Besides, some participants considered ANC visits as unnecessary because they highly depended and believed in the efficiency of herbal treatment as well as traditional midwives. These aforementioned cultural factors contributed greatly to late presentation of pregnant mothers for ANC visits at the hospital. Hence, delays in the first ANC visit. These findings concur with the findings by Ahmad (2019), where he suggests that women's dependency on traditional birth attendants and herbal treatment caused delayed ANC presentation at the hospitals. Most women perceived such processes as a mere waste of time. On the other hand, Yadufasije (2017), observes that some myths and superstitions within the society influenced women towards late or no presentation for Antenatal Care in the hospitals.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the conclusion, summary and recommendations of the research for further studies section as per the objectives of the study.

5.2 Summary of the Findings

The objective of this study was to investigate the determining reasons for the first antenatal care visit. Maternal individual reasons noted were, lack of money to attend ANC, inability to afford care, lack of education on the importance of attending ANC care. Other maternal individual reasons were fear of being tested for HIV, STIs and being infected by COVID –19. Fear of contracting COVID -19 as a reason for not attending first ANC on time, made this study unique since it was done during a pandemic. All these factors negatively affected the timing of the first ANC visit. Hospital factors that seemed to also affect the timing of the first ANC visit were long waiting times in queues, unqualified staff and the quality of care. In Tenwek hospital, the respondents noted that the quality of care and qualifications of staff was good but long waiting times and the complexity of navigating the hospital processes hindered the attendance of the first ANC visit.

Lastly, the cultural factors that affected the timing of the first ANC visit included misconceptions about ANC visits that the visits would negatively affect the pregnancy, that herbalists were better and the fact that they needed permission from their mothers-in-law negatively also affected the timing of the first ANC visit.

5.2.1 Conclusion

In this study, ANC attendance was considered important but the study participants seemed not to be well informed of the right gestational age at which to start ANC and the importance of ANC visits. Notably, several factors enhanced or discouraged the good timing of ANC. The facilitators of timely first ANC were supported by family members, partly financial stability and good image of the health facility as far as service provision is concerned. However, several factors discouraged pregnant women from timely first ANC and they were lack of knowledge, social-cultural, economic and partly poor nature of service provision. Therefore this means that a lot of education needs to be done in the communities to help advocate for timely ANC visits.

5.3 Recommendations

5.3.1 Recommendations for Hospital Management

Pregnant mothers should have their own registration office and should be attended to separately from the rest of the patients to reduce queues and delays in attendance. Women coming for ANC visit should be taught on the importance of attending ANC on the right time. The community should be engage by use of CHW's and other community administrators to create awareness on the importance of ANC attendance and to provide meaningful follow-up of pregnant women in the community.

5.3.2 Policy Recommendations

The following are recommendations based on the research findings:

NHIF approvals for diagnostic and treatments for pregnant mothers should be easier than the current process. Provisions should be made to make drugs more accessible and highly subsidized.

Local health facilities should be empowered with personnel and the necessary adequate testing equipment's to enable them to perform investigations for pregnant women at their nearest health facility to avoid long queues in the referral facilities...

5.3.3 Recommendations for Further Research

For further research, the following are recommendations:

A study on the impact of the free maternal and child services (LINDA MAMA) on the attendance of ANC the Impact of decentralization of health on ANC visits among women and An investigation of the motivating factors for women in presenting for ANC on time

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APPENDICES

Appendix I: Informed Consent

This informed consent is for women coming for antenatal care without any complications.

Dr. Kositany Hillary Kirui; Principal Investigator

Kabarak University

Tenwek Hospital

This Informed Consent Form has two parts:

- Facts Sheet
- Documentation of Consent

You will be given a copy of the full Informed Consent Form

Part I: Information Sheet

Introduction

I am Kositany Hillary Kirui, a Family Medicine resident at Kabarak University researching to find out on reasons for your first coming to the clinic today. This will require you to answer questions by explaining.

Purpose of the research

The aim of the research is to improve understanding of antenatal care time to start and how often to attend antenatal care and possible interventions to improve attendance and care. This is possible with knowledge obtained from the community involved and will influence health policymakers as well.

Type of Research Intervention

This research will involve your participation in an interview where we discuss some questions about what you want to be done in the future.

Participant Selection

You are being invited to take part in this research because we believe that your input will contribute to our understanding and knowledge of our local preferences.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate in all the services you receive from us

will continue and nothing will change. You can also withdraw at any point with or without a reason.

Procedures

All interviews will be done in one of the offices in the MCH department where it has been known to provide adequate privacy as it has been used for confidential counselling. English, Kiswahili or Kipsigis language will be used depending on the language you are comfortable with. You will be provided with a chair to sit on.

Duration

The interview will last for about forty-five minutes and the interview will be recorded using a tape recorder so that the information you give can be captured accurately. Your name and other details that identify you as an individual such as your hospital record number, your NOK or your residence will not be included in the recording. The recording will be used for this study only. The only persons who will handle the recording are the PI and the person who will be with you during the interview.

Risks

We are asking you to share with us some very personal and confidential information, and you may feel uncomfortable talking about some of the topics. You do not have to answer any question or take part in the interview if you don't wish to do so, and that is also fine. You do not have to give us any reason for not responding to any question, or for refusing to take part in the interview.

Benefits

There may be no direct benefit to you, but your participation will help us identify ways to improve the care delivery approaches in ANC.

Reimbursements

You will be given two hundred Kenya shillings as part of your transport expenses a cup of tea and a snack will also be provided as we interact during the interview session.

Confidentiality

Interviews will be done in one of the offices in the MCH department where it has been known to provide adequate privacy as it has been used for confidential counselling. We will not be sharing information about you to anyone outside of the research team. The information that we collect from this research project will be kept private. Only the

researchers will see the information we will lock the information up with a lock and key. It will not be shared with or given to anyone. This is not very convincing.

Sharing the Results

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. We will share the findings with the two health facilities and the school administration. We hope to publish the results so that other interested people may learn from the research and this includes the policymakers, women in the community and other leaders. This too is not convincing. Explain in details the output of their interview and how it will be disseminated.

Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so, and choosing to participate or not participate will not affect the services you receive from us. You can also withdraw at any point of the study.

Who to Contact

If you have any questions, you can ask now or later. If you wish to ask questions later, you may contact the following: Principal investigator, Dr Hillary Kositany 0722921373. Also, provide the number of the IREC chairman.

Part II: Certificate of Consent

I have been invited to participate in research about the timing of antenatal care in pregnant mothers without any complications.

I have read the foregoing information, it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Number of Participant for example 001_____
Signature of Participant _____
Date _____

If illiterate

I have been informed well by an accurate reading of the consent form and explained well and I have had the opportunity to ask questions. I consent freely.

Print number of participant _____Thumb print of participant 

Date ----------

Statement by the researcher/person taking consent have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

An interview will be done. Notes will be taken and the interview will be audio-recorded and the information will be kept confidential.

I confirm that the participant was allowed to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this form has been provided to the participant.
Print Name of Researcher/person administering the
consent_____
Signature of Researcher /person administering the
consent_____
Date _____

Appendix II: Kiswahili Consent

Utoaji idhini huu ni kwa wanawake wanaokuja kwa kliniki ya utunzaji mimba kabla ya kuzaa bila matatizo yoyote iwe ya madawa au uhusiano na ujauzito.

Daktari Kositany Hillary; Mtafiti mkuu

Chuo Kikuu cha Kabarak

Hospital ya Tenwek

Utoaji Idhini huu una sehemu mbili;

- Karatasi inayotoa habari (Kukujulisha Kuhusu Uchunguzi)
- Hati ya Idhini (kwa kutia sahihi ikiwa unachagua kushiriki)

Utapewa nakala ya fomu yote ya utoaji Idhini

Sehemu ya kwanza: Karatasi Inayotoa Habari

Utangulizi

Mimi ni Kositany Hillary Kirui, mwanafunzi anayesomea madawa ya familia katika chuo kikuu cha Kabarak na ninafanya kazi kwa Hospital ya Tenwek. Ninafanya utafiti wa muundo msingi katika urekebishaji was muda kwa kuwasilisha habari za utunzaji wa mimba kabla ya kuzaa. Ninaenda kukujulisha habari na katika utafiti huu.

Utoaji Idhini huu unaweza kuwa na maneno usioelewa. Tafadhali uniambie nikome tunaposoma pamoja habari hii na nitachukua muda kueleza kwa makini. Ikiwa una swali lolote baadaye, unaweza kuniuliza au uulize mtafiti Mwingine.

Lengo la Utafiti

Lengo la uchunguzi ni kuimarisha ufahamu wa utunzaji wa mimba kabla ya kuzaa, wakati was kuanza na jinsi ya kuhudumia utunzaji wa mimba kabla ya kuzaa na kuingilia kati ikiwezekana kwa sababu ya kuimarisha huduma na utunzaji. Hii inawezekana pamoja na ufahamu unaopatikana kutoka kwa jamii inayohusishwa na itaathiri wale wanaochangia katika sera ya afya pia.

Aina ya Utafiti wa kuingilia Kati

Utafiti huu utahusisha ushirikiano wako katika mahojiano ambapo tutajadili kwa makini maswali machache kuhusu ni nini has unataka kutekelezwa katika siku za usoni.

Uteuzi wa washiriki

Unakaribishwa kushiriki katika utafiti huu kwa sababu tunahisi kuwa maoni yako yanaweza kuwa ya maana Zaidi kwa kufahamu na kuelewa kwetu katika upendeleo wetu wa kawaida.

Washiriki wa Kujitoa

Ushirika wako katika utafiti huu ni wa kujitolea kabisa. Ni chaguo lako kushiriki au kutoshiri; huduma zote utakazopokea kutoka kwetu itaendelea na hakuna kitakachobadilika. Unaweza pia kuondoka wakati wowote ukiwa na sababu au bila sababu.

Utaratibu

Muuguzi au mtaalamu wa matibabu atakupokea, atachunguza hali yako, atakuuliza kama utakubali kushiriki katika uchunguzi na atakuelekeza kuenda pahali ambapo msaidizi wa mtafiti anasubiri. Mahojiano yote yatatendeka katika chumba cha siri kwa lugha ya kingereza, Kiswahili au Kipsigis kutegemea uwezo wako wa kuelewa. Utafanywa kuridhika katika mahojiano; hivyo utaweza kuchagua kukaa kwa kiti au kwa kitanda au hata sofa.

Muda

Mahojiano yatachugua muda kama dakika arobaini na tano na yatarekodiwa kutusaidia kupata maelezo yako kinaganaga.

Tahadhari

Tunakuuliza utuambie maneno yako machache ya siri na unaweza kuhisi vibaya unapotuongelesha kuhusu mada machache. Hulazimishwi kujibu swali lolote au ushiriki katika mahojiano ikiwa si kwa hiari yako na hiyo si shida. Haulazimishwi kutupatia sababu yoyote kwa kutoshiri kwa swali lolote au kwa kukataa kushiri katika mahojiano.

Manufaa

Labda hakutakuwa na manufaa kwako mwenyewe lakini ushirika wako hakika ni kutusaidia kugundua jinsi ya kusaidia wagonjwa wengine au mteja waweze kuhudhuria utunzaji wa mimba kabla ya kuzaa kwa wakati unaofaa na kutembelea kliniki kila mara kama inavyotakikana katika siku za usoni.

Kulipia Gharama

Hautapewa marupurupu yoyote kwa kushiriki katika utafiti. Hata hivyo, tutakupa kikombe cha chai na kumbwe (Snack) tunapojadiliana wakati wa mahojiano.

Siri ya utafiti

Utafiti unafanywa katika chumba cha siri kwa hospitali. Hatutaambia mtu yeyote ambaye si mtafiti na hayuko kati ya wale wanaofanya utafiti. Habari tutakazokusanya kwa utafiti huu wa muundo msingi zitawekwa ziwe siri. Watafiti tu ndio wataziona maelezo na tutafunga maelezo hizo kwa kufuli na ufunguo. Hakuna yeyote atakayeambiwa au kupewa maelezo hizo.

Kubadilishana maoni ya matokeo

Hakuna kitakachofunuliwa kwa yale unayotuambia leo kwa wale ambao si wafanyi utafiti, hakuna kitakachosemwa kuhusu jina lako. Tutabadilishana maoni kati ya nyezo mbili za afya na wasimamizi wa shule. Tuntumaini kuchapisha kwa umma matokeo ili watu wengine watakaovutiwa wataweza kujifunza kutoka kwa utafiti nah ii itajumuisha wanaowajibika kwa kuchangia katika sera mbalimbali, wanaowajibika kwa kuchangia katika jamii na viongozi wengine.

Haki ya kukataa au kujiuzulu

Haulazimishwi kushiriki katika utafiti huu ikiwa hutaki kushiriki, na kuchagua kushiriki au kutoshiriki haitaathiri huduma utakazopata kutoka kwetu. Unaweza pia kujiuzulu wakati wowote wa utafiti.

Mhusika Mkuu

Ikiwa una maswali yoyote unaweza kuuliza sasa au baadaye.Ikiwa ungependa kuuliza maswali yoyote. Baadaye, unaweza kuwasiliana na nambari ifuatayo;

Mtafit mkuu; Daktari Hillary Kositany 0722921373

Sehemu ya Pili: Hati ya Idhini

Nimealikwa kushiriki katika utafiti kuhusu urekebishaji wa mudautunzaji wa mimba kwa wanawake wajawazito bila matatizo yoyote.

Nimesoma maelezo yaliyotolewa mwanzoni au niliyosomewa. Nimekuwa na fursa kuuliza maswali yoyote ambayo nimeyauliza nimeridhika nayo. Ninakubali kwa kujitoa kushiriki katika utafiti huu.

Chapisha nambari ya mshiriki_____

Sahihi ya mshiriki_____

Tarehe_____

Ikiwa hajui kusoma au kuandika;

Nimeshuhudia kusoma kwa uangalifu fomu ya kuridhia kwa uwezo wa mshiriki; na mtu mbinafsi amekuwa na fursa wa kuuliza maswali. Ninathibitisha kuwa mtu mbinafsi ametoa ridhia yake bila kulazimishwa.

Chapisha nambari ya mshiriki_____Kidole cha mshiriki

Sahihi za washahidi _____

Tarehe_____

Kauli ya mtafiti au mtu anayeshughulika na Idhini

Nimesoma kwa uangalifu karatasi ya habari kadri ya uwezo wa mshiriki, na kwa uwezo wangu wote kuhakikisha kuwa mshiriki, na kwa uwezo wangu wote kuhakikisha kuwa mshiriki anafahamu kuwa yanayofuata yametekelezwa.

1. Mahojiano yatafanyika
2. Kunakili maneno kufanyika na mahojiano kurekodiwa.
3. Habari zote sitawekwa sirini

Ninathibitisha kuwa mshiriki alipewa fursa kwa kuuliza masawli kuhusu uchunguzi na maswali yote yalioulizwa na mshiriki yamejibiwa sawasawa na kwa uwezo wangu wote. Ni nathibitisha kuwa mtu mbinafsi hajalazimishwa kuridhia na idhini imetolewa bila kulazimisha na kwa kujitoa

Nakala iliyoshuhudiwa ya fomu hii imekabidhiwa mshiriki

Chapisha Jina la mtafiti au mtu anayesimamia idhini

Sahihi ya mtafiti au mtu anayesimamia idhini _____

Tarehe_____

Appendix III: Kartasit Nekinyite Kokakioror (Kipsigis)

Inoni kotebset en chepyosok chepwone chikilisiet kotomo kosich lakwet komotinye kewelinwek en borwekwak anan konamge ak managenywan.

Dr. Kositany Hillary Kirui; Ne indochin chigilisiet
Sukulitab barak en Kabarak
Sipitalitab: Tenwek

Chikilisioni kotinye keberwek oeng

- Ngalek konamge ak chikilisiet (Kepchei ngalechu ketebe koboten)
- Ole isire (ye imore yon keyan)

Kikonin kartasit tugul nebo kayanani

Kebeberta ne tai: Ngalek che indou
Tounet/ Kanamet

Ane ko a Kositany Hillary Kirui, Kipsomanietab en sukulitab barak ne bo Kabarak, ne somonchin konyoiset ab kapchi ak koboisie en sipitalitab Tenwek. Oyae Chikilisiet en chepyosok kotom kosich lakwet. Agonin ngalek konamgei ak chikilisioni ak atachin iiku agenge en chikilisioni.

Imuchi komi ngalek chemuch komeguiye kaigai itonoision yon kitese tai, asi o ororun. Yon itenye tebut kokakobata itebenan anan ko chikilindet age.

Tokyinet abge nebo chikilisioni

Tokyinetabge ne bo chikilisioni ko ketes koguiyet en kasarta ne tomo kesich lakwet kinam kenyor dakitari, kenyor dakitari kogabataita kasarta netia ak ortinwek che kitesen kosorwek chekinyoru dakitari ak ribset.

Niton komukogsei yon mi naet ne kokinyor en nganaset ne imi ak tinye nito bik che chobe ngatutik konamgei ak chametab ge nebo borwek kogeny.

Tuguk chetinye gei ak chikilisioni

Chikilisioni komoche imi en tebsetab agenge en agenge yekingololen tebutik en mutyonet agobo tuguk che imoche keyai en betusiek che bwonei.

Olekilewendo bik chekitebsen

Kakitachin iegu agenge en chekitebsen amun kibwote kele ngalek che igonu kotoretech missing en koguiyet ak naetab tuguk chechome bike n nganaset.

Icham ketebsenen komomi birchinet

Ketebsenen en chikilsioni komomi birchinet agot kitigin lewenengung iyan ketebsenen anan iesie. Yeiesie ketebseneni, ko toretet tugul netam inyoni en echek koteses tai ama woloksei kii imuche iiste kei en kasarta age tugul komi amune anan komomi.

Ortinwek

Tochin chepkerichot anan ko konyoindet kocheng kenai kit neiu, kotebenen ngot ichome ketebsenen en chigilisioni ak kondoun iwe olemi toretikab chikilindet kogonyin. Tebsoni tugul kotese tai en ole momi bik alak eng kutitab chumbek, Kiswahili anan ko kipsigis kotyiengei kamuget ab koguiyengung. Kimoche igas imi komie en kebsoni tugul, ko u noto imuch ilewen iteb ngwony en kecheret anan ko kitandet.

Kasarta

Imuch koib tebsoni kasarta nebo dakikaisiek artam ak mut ak ketoe ngalek tugul si kotoretech kenyurun ngalek tugul che kemwa.

Ngoiyondisiek

Kisomin any ibchei kobotech ngalek chebo sobengung nebo orit ak chebo ungat. Imuch igas komoto kimwochi chi ngalek alak. Mokibirchin iwolu tebutik alak anan itestai e tebset angot komemoche ak komie noton agine. Makibirchin igonu amunei asi komewolu tebutik alak anan kokeesie ketebsen.

Kelchinoik

Imuch komomi kelchinoik che tinyin inyendet , ago iyan kotebsenen komuch kotoretech kenai ole kimuche ketorititen biik alak chebwone kochenge toretet.kotom komanagat en kasarta ne nyolunot ak konai kole nyolu kocheng toretet konyil ata kotom kosich lakwet en betusiek che bwonei.

Kokochinoik

Mokikonu kiit agetugul asi kobit iyan ketebsenen .ingandan imuch kinagin chaik ak kit ne kiomdoi en kasarta ne kitebsenen.

Mokimwochin bik alak

Tebsoni tugul keyoe en ko ole momi chii age en sipitali. Mokimwochini ngaleguk chii age kobaten ichek che tinyegei ak chikilisioni. Ngalek tugul chekokinyoru en inye en tebsoni tugul komogingonjin chi agei kiribei en ungat.

Chikiluk kityok che imuche koger ngalechu ak keger wolutikuk en ole moyote chi agei. Mokimwochin chi anan kigochi chi age.

Pcheetab wolutik

Momi kit ne imwowech rani negemwochini chi age nemo chikilik ak momi ki ne kemwoitoen kainengung. Kipchechini wolutik en ole kikoitoen toretet ak kandoinatetab sukul. Kikose takisir wolutichu asi bik che kamach komuch konetkei en chikilisioni ,bichto komuch koboto chobikab nhotutik ,chepyosok en nganaset ak kandoik alak.

Chomchinet iesie ana iistegei

Mokibirchin iwolu tebutikab chikilisioni angot komemoche, ilewen iwolu tebutik anan komewolu komotinyegei ak toretet nekikonin . imuche iistegei en kasarta agetugul yekitebsenen.

Ngo ne inyoru

Angot itinye tebut en inguni anan yeibatai .angot imoche iteb tebutik yekagobatai tebsoni, imuch itebe bichu.

Neo en chikilisiet , Dr Hillary Kositany- 072292137

Kebeberta nebo oeng; chamet ab tebset

Kaketachan awal tebutik ab chikilisioni agobo kasarta nebo chengetab toretet en chepyosok che monogotin komotindo kewelinwek.

Kaasoman ngalek chebo kebeberta nebo tai anan ko kokesomonwon. Kaaanyoru boroindo ateb tebutik ak tebutik tugul che kateb kokokiwolwon komie. Kaayan komoen birchinet ates tai en chikilisioni.

Sir koitetab chito ne kitebsen _____

Kamaretab chito ne kitebsen _____

Au[tarikit] _____

Angot komowa sugul/ angot komosoman

Kaabaorian kesomonchini komie chamchinet en chito ne imuch kotebsen ak kakonyor chichito boroindo koteb tebutik .kaabaorian komie ole chichito kokaiyan en chamet komo en birchinet.

Sir koitetab chito ne kitebsen

Chiletab siiyet _____

Kamaretab baoriat _____

Au tarikit _____

ngolyotab chikilindet / chito nekose chomchinet

Kaasomanchi komie ngalek tugul chito ne imuche kotestai en tebset ak en naenyun tugul kokoko kuiyo chito ne kitebsen tuguk chekibendi keyoe ko;

1. Ketebsen inendet
2. Kisirisie ak ketoe tugetab ngalek
3. Ngalek tugul kirebei en ungat

Abaorianu ale chito ne kitebsen kokikochi boroindo koteb tebutik kotinyegei ak chikilisiet ak tebutik kotinyegei ak chikilisiet ak tebutik tugul chekateb kokokiwolchi komie ak en naenyun tugul.

Abaoriani ale mokibirchin chichi asi kokon chomchinet en siret ak kokigo chamchinet en siret en katiagnatet ak chamet.

Kokikochi kartasit ne kiyite chichi wolu tebutik. Sir kainetab chikilindet / chito ne tononchin chamchinet.

Kamaretab chikilindet /netononchin

Chamchinet: _____

Au (tarikit)_____

Appendix IV: Interviewer Guide

ANC Timing

1. Tell me why you are here today
2. Is this your first ANC visit
3. In your opinion, when is the best time pregnant women should start ANC?

Reasons for ANC

1. Tell me the benefits of attending ANC on time
2. What motivates you to come to the clinic today for ANC services

Barriers to ANC Services

1. Tell me of some situations that discourage women from seeking ANC services
2. Is your partner/family would influence your ANC attendance?
3. Why do you think some pregnant women present late at the ANC
4. Tell me how you would rate the ANC services in this hospital

Recommendations

What recommendations might you have for other pregnant women regarding ANC services in this hospital?

Kiswahili Part of the interviewer guide

ANC Timing (Muda wa ANC)

1. Niambie ni kwa nini uko hapa leo
2. Je, hii ndio ziara yako ya kwanza ya ANC
3. Kwa maoni yako, wakati upi ndio bora kwa wamama wajawazito kuanza ANC

Reasons for ANC (Sababu za kupata huduma ANC)

1. Niambie faidha za kuhudhuria ANC kwa wakati/mapema
2. Ni nini inakuhamazisha kuja huduma ya ANC leo?

Barriers to ANC Services (Vizuizi za ANC)

1. Niambie baadhi ya vizuizi vinavyozuia wajawazito kutafuta huduma za ANC
2. Niambie kama kuna namba ambavyo mpenzi wako au familia wanawezaadhiri huduma zako za ANC
3. Ni mambo yapi yanaweza kuzuia wanawake wajawazito kutafuta huduma ya ANC mapema

4. Niambie jinsi ungeweza kupima huduma za ANC katika hospitali hii?

Mapendekezo

1. Mapendekezo gani unaweza kuwapa wanawake wengine wajawazito kuhusu huduma za ANC katika hospitali?

Appendix V: Coding Process

Table 1: Showing Line by Line Coding Prior to Identification of Categories and Themes

Why did you choose to start clinic today for this pregnancy? *I have chosen to start ANC visit today because if I think I am pregnant and in case of any issue I will get to be helped also I have not* seen my menses for the last four months. *I have been assuming that I am pregnant of which it might not be the case.* a. What are your feelings towards your current pregnancy? Interviewee: *If i got your question well i think I have been feeling well no issues* b. Interviewer: Are there other reasons for choosing today as your first day visit to the clinic (probe to get more reasons) Interviewee: *This is my 2nd pregnancy my first pregnancy I had gone to another dispensary first but at the middle of the pregnancy is when I decided to come to this facility and found out that I receive a good care and more information that's why I decided to come to this facility on my second pregnancy.* c. Interviewer: Share with me the benefits that you know or have experienced for making the first clinic visit within 12 weeks Interviewee: *For sure I don't know the right time to start but as soon as you discover that you are pregnant but at least not go beyond five months this will enable good care from the health workers and there are some medications that they are normally given to boost blood and a scanning to be done which I think is best done when the baby is visible in the stomach.* Why did you choose to start clinic today for this pregnancy? *I have come to clinic because i am pregnant and I wanted to know how my baby is doing and at least to undergo a few check-up's since I have been having some back pain and some discomfort on my stomach and pain on mostly while passing urine* What are your feelings towards your current pregnancy? As I told you otherwise I am ok *Interviewee: Apart from back pain I have been feeling well* *b.* Interviewer*:* Are there other reasons for choosing today as your first day visit to the clinic (probe to get more reasons) *Interviewee: To speak the truth I was not intending to be pregnant I had two miscarriages in 2016 and in 2018 and I think it was because of mismanagement at the health centre. I thought of coming earlier to this hospital at least not to have similar experiences. As you know this place you get all what you need* *c.* Interviewer: Share with me the benefits that you know or have experienced for making the first clinic visit within 12 weeks *Interviewee: ANC helps the mother and the unborn baby given the situation that they are both in. In case of any disease that can affect the baby and the mother they can be managed earlier before the mum*	1. Seeking help Not sure of pregnancy Not feeling well Want to know how baby is doing To be sure of pregnancy Advised to attend Examination Collection of ANC booklet To receive book and be given net To see doctor Reception of Good care To have a healthy pregnancy Availability of time Timely attendance/ timely services Know blood group Financial power and availability Not knowing the right time to attend Just attended Medication for pregnancy To get a healthy baby Knowledge of the status of the baby For routine check up Healthy education Insurance Proximity Cost Long queues Long waiting time Several test STI screen Encouragement from colleagues *queues, money and*

develops complications like what I encountered last time. Why did you choose to start clinic today for this pregnancy? *Because I am pregnant and feel I needed to be seen and do some scanning and to be sure on the pregnancy, also I was advise by mother to start clinica.* *Interviewer: What are your feelings towards your current pregnancy?* *Interviewee: I am feeling ok I don't think I have had any challenge* *b.* Interviewer: Are there other reasons for choosing today as your first day visit to the clinic (probe to get more reasons) *Interviewee: I got time today and felt needed to start and be given medication which they are generally taken during pregnancy and also the need to be checked* *c. Interviewer: Share with me the benefits that you know or have experienced for making the first clinic visit within 12 weeks* *Interviewee: I don't really know of any and does it require that people attend clinic before twelve weeks? I think just attend.* Why did you choose to start clinic today for this pregnancy? *I just made a decision to come for clinic today so as to be checked and the baby and be sure we are both doing well.* *Interviewe*r: What are your feelings towards your current pregnancy? Interviewee: No feelings b. Interviewer: Are there other reasons for choosing today as your first day visit to the clinic (probe to get more reasons) Interviewee: *I have always been attempting to come to this hospital because it has good reputation and I knew I will get all the necessary medication otherwise I would have started in another place close to my home.* c. Interviewer: Share with me the benefits that you know or have experienced for making the first clinic visit within 12 weeks Interviewee: *It would be good to start early because of medication that pregnant mothers are given to take during pregnancy.* Interviewer: Why did you choose to start clinic today for this pregnancy? Interviewee:*I have always been coming whenever I am pregnant this is my 3rd Pregnancy and have come to be examined me and the baby* a. Interviewer: What are your feelings towards your current pregnancy? Interviewee:*I am feeling well* b. Interviewer: Are there other reasons for choosing today as your first day visit to the clinic (probe to get more reasons?) Interviewee:*Not really I have been attending other facilities and thought of coming here today, last visit in a dispensary I was told to come here for other medication and I did not like the experience. I may decide to go to alternate with a clinic near to my place.* c. Interviewer: Share with me the benefits that you know or have	*distance* *clinic in the village where no scanning would be done* *staffs are also good* *it is not safe nowadays to travel anyhow* *processes* *will do investigations* *M-pesa which seems to be cumbersome* *having issues with fertility* *line is too long you don't even go for lunch* *line is too long you don't even go for lunch* *the roads are not good* *Encouragement from spouse* Safety with Covid 19 *better service* *I trust the care*

experienced for making the first clinic visit within 12 weeks Interviewee:*To know the status of baby and to get some medication which are usually taken during pregnancy also to get a healthy baby?* Why did you choose to start clinic today for this pregnancy? Interviewee: *I came to start clinic and so that I can get to know how I am doing in this pregnancy* a.Interviewer: What are your feelings towards your current pregnancy? Interviewee: I am feeling fine b.Interviewer: Are there other reasons for choosing today as your first day visit to the clinic (probe to get more reasons?) Interviewee: *For check-up and advise* c.Interviewer: Share with me the benefits that you know or have experienced for making the first clinic visit within 12 weeks Interviewee*: Really that's a hard question but I think it would be good for check-up though I thought it's too early to start.* Why did you choose to start clinic today for this pregnancy? Interviewee: *I have been feeling unwell for the last few days* a. Interviewer: What are your feelings towards your current pregnancy? Interviewee: For the last few days I have been feeling unwell otherwise I have been normal b Interviewer: Are there other reasons for choosing today as your first day visit to the clinic (probe to get more reasons) Interviewee: I came because I have not been feeling well b. Interviewer: Share with me the benefits that you know or have experienced for making the first clinic visit within 12 weeks Interviewee: *Apart from the care you get I don't think I have more experience* Why did you choose to start clinic today for this pregnancy? Interviewee: *Because I thought it is time to start I think I am even late I should have come earlier.* *a.* Interviewer: What are your feelings towards your current pregnancy? Interviewee: I have been feeling well b.Interviewer: Are there other reasons for choosing today as your first day visit to the clinic (probe to get more reasons) Interviewee*: I just felt it was the right time to come I was told in my last pregnancy that I was late and this time I thought I should come earlier.* c.Interviewer: Share with me the benefits that you know or have experienced for making the first clinic visit within 12 weeks Interviewee: *You get to start the right care early and in case of any issue or problem you get attended early.*	

Development of Initial Themes from Descriptive Codes	
Initial codes	**Categories**
Coming for help Not sure of pregnancy Not feeling well Want to know how baby is doing To be sure of pregnancy Advised to attend Examination Collection of ANC booklet	**1** Not sure of pregnancy Not feeling well For ANC booklet
Good care To have a healthy pregnancy Availability of time Timely attendance/ timely services Know blood group Financial power and availability	**B** When they get time Finance Services
Not knowing the right time to attend Just attended Medication for pregnancy To get a healthy baby For routine check up Healthy education	**C** Not knowing the right time Services Health education
Insurance Proximity Cost Long queues Long waiting time Several test STI screen Encouragement from colleagues *queues, money and distance* *clinic in the village where no scanning would be done* *staffs are also good* *it is not safe nowadays to travel anyhow* *processes* *will do investigations* *M-pesa which seems to be cumbersome* *having issues with fertility* *line is too long you don't even go for lunch* *line is too long you don't even go for lunch* *the roads are not good* *Encouragement from spouse*	**2** Insurance/ Finance Distance Queues Fear of some test Support from colleagues and family Availability of quality of services Effects of Covid 19 Transactions inconveniences (Use of Mpesa) Transport Trust **3** Cultural beliefs/ Superstition/Taboos. Support Not knowing the right time Family support from spouse and relatives Time Fear Secrecy of pregnancy Preference for Herbal Medicine **4 and 5** Quality of service

Safety with Covid 19 *better service* *I trust the care* ***3*** Pregnancy disclosure discouraged in my community Relieved from home activities or duties Use of herbal medication is preferred Jealousy from other community members Not knowing the right time Taboos (food and visit to other places) Permission from close relatives Feeling well Mothers in laws Peers and family Effects of the drugs on babies health When they get time Being ashamed **4 and 5** Quality service provision Long queues and long waiting time Lack of finances Unqualified staff providing services " student nurses" Traffic congestion at the hospital gate Corona virus "Covid 19"	provision Time spend in the hospital Staff use of students Financial issue Covid 19
Categories **1** Not sure of pregnancy Not feeling well For ANC booklet **B** When they get time Finance Services **C** Not knowing the right time Services Health education **2** Insurance/ Finance Distance Queues Fear of some test Support from colleagues and family Availability of quality of services Effects of Covid 19	**Themes** Not knowing the reason and right time for ANC visit Socio-economic reasons Hospital service provision Effects of Covid virus 19

Transactions inconveniences (Use of Mpesa) Transport Trust **3** Cultural beliefs/ Superstition/Taboos. Support Not knowing the right time Family support Time Fear **4 and 5** Quality of service provision Time spend in the hospital Staff use of students Financial issue Covid 19	

Appendix VI: Bomet County Map

Appendix VII: University IPGS Letter

KABARAK UNIVERSITY

Private Bag - 20157
KABARAK, KENYA
http://kabarak.ac.ke/institute-postgraduate-studies/

Tel: 0773 265 999
E-mail: director.postgraduate@kabarak.ac.ke

BOARD OF POSTGRADUATE STUDIES

28th April 2020

The Director General
National Commission for Science, Technology & Innovation (NACOSTI)
P.O. Box 30623 – 00100
NAIROBI

Dear Sir/Madam,

RE: HILLARY KOSITANY (GMMF/M/1349/09/16)

The above named is a Masters Student at Kabarak University pursuing Master of Medicine in Family Medicine. School of Medicine and Health Sciences. He is carrying out a research entitled ***"Determinants of First Antenatal Care Visit among Pregnant Women Attending Tenwek Hospital, Bomet County - Kenya".*** He has defended her proposal and has been authorized to proceed with field research.

The information obtained during this research will be used for academic purposes only and will be treated with utmost confidentiality.

Please provide him with a research permit to enable him to undertake the research.

Thank you.

Yours faithfully,

Dr. Wilson Shitandi
AG. DIRECTOR, INSTITUTE OF POSTGRADUATE STUDIES

Appendix VIII: NACOSTI Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 184974

Date of Issue: 17/October/2019

RESEARCH LICENSE

This is to Certify that Dr.. Kosgeny Hillary of Tenwek Hospital, has been licensed to conduct research in Bomet on the topic: Determinants of First Antenatal Care visit Among Pregnant Women Attending Tenwek Hospital, Bomet County, Kenya. for the period ending : 17/October/2020.

License No: NACOSTI/P/19/1722

184974

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

Appendix IX: Kabarak IREC Letter

KABARAK UNIVERSITY

INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE

P.O. Private Bag – 20157 Kabarak M: +254 724 887 431 F: +254 51 343529

www.kabarak.ac.ke/irecsecretariat.html E: irecsecretariat@kabarak.ac.ke

Reference: KABU01/IREC/015/VoL1/2020

22nd Jan 2020

Formal Approval Number: KABU/IREC/015

Dr **Hillary Kositany** GMMF/M/1349/09/16, Department of Medicine (Family Medicine)
School of Medicine and Health Sciences, Kabarak University

KABARAK UNIVERSITY
INSTITUTIONAL RESEARCH ETHICS COMMITTEE
22 JAN 2020
APPROVED
P.O. PRIVATE BAG - 20157, KABARAK

Dear **Dr Kositany,**

FORMAL APPROVAL OF RESEARCH PROPOSAL

The Institutional Research and Ethics Committee reviewed your research proposal on 7th October 2019 titled:

"Determinants of First Antenatal Care visit among pregnant women attending Tenwek Hospital, Bomet County, Kenya."

You have addressed all concerns raised and now I am pleased to inform you that your proposal has been granted a Formal Approval Number: **KABU/IREC/015** on 17th January 2020. You are therefore permitted to start your study.

Note that this approval is for 1 year; it will thus expire on 21st January 2021. If it is necessary to continue with this research beyond the expiry date, a formal request for continuation should be made in writing to KABU IREC secretariat two months prior to the expiry date.

You are required to submit progress report(s) regularly as dictated by your proposal. Furthermore, you MUST notify the committee of any proposal change(s) or amendment(s), serious or unexpected outcomes related to the conduct of the study, or study termination for any reason. The committee expects to receive a final report at the end of the study.

Yours faithfully,

Prof. Wesley Too, PhD, MPH
Chairman Institutional Research and Ethics Committee

Cc Registrar- Academic Affairs and Research
Dean School of Medicine and Health Sciences
Director, Institute of Post Graduate Studies

Kabarak University Moral Code

As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord. (1 Peter 3:15)

Kabarak University is ISO 9001:2015 Certified