EXPLORING ANTENATAL CARE EXPERIENCES AMONGST PASTORALIST COMMUNITIES IN KENYA: A FOCUSED ETHNOGRAPHIC STUDY

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DECLARATION

This thesis is original work and has not been submitted for any other degree at any other institution or University.

Signed…… (Talaso D. Barako) … … Date: 31st July 2020.

ABSTRACT

Background: Antenatal care (ANC) is a very important component of maternity care to ensure a healthy pregnancy and safer childbirth, particularly in areas where maternal health is poor. However, whilst progress has been made to reduce maternal deaths and increase ANC coverage globally, challenges remain in bringing ANC to specific remote or rural communities, such as pastoralist communities in sub-Saharan Africa. This PhD study focuses on ANC amongst a semi-nomadic pastoralist community in one part of Kenya.

Pastoralist communities are herders of domesticated livestock, though some incorporate agriculture into pastoralism. Nomadic pastoralists organise their lives around the needs of their animals, which is characterised by migration depending upon weather patterns. In Kenya, there are at least 5.6 million rural pastoralists. Existing reports show that pastoralist communities tend to lack access to services and face long-standing marginalisation, poverty, and vulnerability. Further, in some African countries, including Kenya, gender norms mean that pastoralist women face double marginalisation in terms of decision making, access to education, and healthcare services. The research setting is Marsabit County in Kenya where 80% of the population is pastoralist. Marsabit has the fourth highest maternal mortality and morbidity rates in Kenya at 1,125 per 100,000 live births, and the highest teenage pregnancy rates. Pastoralist women's access to and use of ANC services in Kenya has not been studied previously.

Study aim: To explore the experiences of ANC amongst the pastoralist community in Marsabit County in Kenya in order to understand key barriers and facilitators of ANC service uptake. Specific objectives are:

1. To explore women's knowledge, experiences, and perspectives on ANC services, and factors influencing ANC services use.

2. To understand men's perspectives regarding factors influencing ANC and their suggestions for possible ways to enhance the use of ANC services.
3. To explore traditional birth attendants' (TBAs) views about ANC, barriers to and potential facilitators for ANC use.
4. To explore nurses' perceptions about the factors that influence the use of ANC services and to observe their practices at the clinic related to these.
5. To identify possible ways to enhance the use of ANC services amongst pastoralist community

Methodology and Methods: This study adopted a qualitative approach, using a focused ethnographic (FE) methodology, underpinned by a philosophy of critical realism. Ethical approval was received from the University of Nottingham and Kenyatta National Hospital/University of Nairobi Ethics Research Committees (KNH/UoN). Fifty-eight participants were included. Methods of data collection included: (i) interviews with women (pregnant and postnatal); (ii) interviews with registered nurses; (iii) focus group discussions with men; (iv) focus group discussions with traditional birth attendants; and (v) observations of nurses' interactions with women during ANC consultations. Data analysis adopted an inductive thematic approach, accompanied by a retroductive process to identify underlying causal mechanisms and structures that influenced ANC use. Data collection took place from January to June 2018.

Findings: The pastoralist community is in a period of transition to contemporary healthcare service use. ANC services are only partially utilised due to two causal mechanisms that shape pastoralist women's ANC experiences and health-seeking. First, government policy is shown to have a strong influence on ANC service utilisation through: (i) a patient record (a handbook), which emerged as a key mechanism that facilitates social inclusion and a gateway to accessing a range of government services; and (ii) re-framing the role of TBAs as referral agents, acting as conduits between community and healthcare services. The handbook acted as a strong

incentive, compelling most women to attend ANC at least once, while the TBA's referral roles created the potential to positively influence health-seeking behaviours around ANC.

Secondly, there are multiple structural barriers that diminish women's ability to access ANC. These include: (i) difficulties of pastoralist lifestyle and infrastructure challenges; (ii) social exclusion for women who experience out of wedlock pregnancy; (iii) health system limitations and women's ANC experiences; and (iv) the nature of the relationship (in particular, a gap in information sharing) between nurses and women. Pastoralist women live in remote and hard-to-reach areas and the challenges related to their pastoralist lifestyle impact their ANC experience. In addition, accessing ANC services was hindered by normative cultural practices that made it hard for women with out of-wedlock pregnancy to disclose pregnancy, leaving them to endure social isolation and stigma.

A new conceptual model of 'partial utilisation' of ANC was developed that encapsulates the key findings of this research. The model represents pastoralist women's ANC use as partial rather than completely absent and the reasons for this. The notion of the community being in a transitional period between traditional and contemporary lifestyles further explains the observed patterns of ANC use.

Implications: The existing model of ANC service organisation and delivery (where services are provided in static health facilities) do not address the ANC needs of pastoralist women. Therefore, in addition to existing aspects of ANC care, context-specific strategies should aim to: (i) provide a comprehensive 'one-stop-shop' ANC service during the initial visit; (ii) offer follow-up through mobile outreach services, and task-shifting by utilising available human resources e.g. community healthcare workers (CHWs) and TBAs; (iii) provision of outreach health promotion services for the community; (iv) sensitively engage with the community and address the cultural barriers related to out of wedlock pregnancy; and (v) address resource constraints in the health facilities and support for the nurses (e.g. skills development and commensurate remuneration).

Implementation of these recommendations requires involvement of government, other stakeholders (e.g. NGOs, funders, donors) and community members (men and women).

Conclusion: This is the first ethnographic study on ANC use amongst pastoralist communities in Kenya and East Africa. It provides novel information about ANC use in this under-researched population and its insights will be of relevance for similar populations globally. Eliciting the experiences and challenges of the pastoralist community provides a basis for developing services and policies that more realistically reflect their unique requirements.

CONFERENCES, PRESENTATIONS, AND POSTERS

- An oral presentation of the perspectives of a pastoralist community regarding antenatal care service at *International Confederation of Midwives Conferences (ICM) Africa Regional Conference***,** *Namibia September 2019*.

- An oral presentation of the perspectives of a pastoralist community regarding antenatal care service on research methodology and findings, University of Nottingham, Doctoral Research Saturday seminar, 18th May 2019.

- An oral presentation of the maternity care in Kenya at the Maternal Health and Wellbeing Research Group forum, University of Nottingham, 25th February 2019.

- Experiences of pastoralist community regarding antenatal care service: Focused Ethnography**.** School of Health Science and School of Pharmacy Allied Health Conference, University of Nottingham, 17th September 2019. Poster presentation.

Paper in preparation: Understanding antenatal care utilisation amongst pastoralist communities: A qualitative focused ethnographic study in Kenya.

This thesis is dedicated

To my family

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GLOSSARY

AAM	Antenatal abdominal massage
AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal care
CHW	Community healthcare worker
C-RCTs	Cluster randomised controlled trials
CORPs	Community owned resources persons
DHIS	District health information system
EBP	Evidence-based practice
HIV	Human immunodeficiency virus
FGM	Female genital mutilation
FGD	Focus group discussion
FMS	Free maternity services
FANC	Focused antenatal care
IPTp	Intermittent preventive treatment in pregnancy
KDHS	Kenya demographic health survey
MoH	Ministry of Health (Kenya)
MDG	Millennium Development Goal
TBAs	Traditional birth attendants
RMNCAH	Reproductive maternal, child, and adolescent health
SDG	Sustainable Development Goal
UHC	Universal health coverage
UNICEF	United Nations Children Fund
UNFPA	United Nations Population Fund
WHO	World Health Organisation

CHAPTER 1
STUDY BACKGROUND

1.1. Introduction to the thesis

This thesis presents a study that explored pastoralist community's perceptions of antenatal care (ANC) and factors that influence pastoralist women's ANC experiences in Marsabit County, Kenya. The thesis has eight chapters, covering views from a range of key stakeholders, including women (pregnant and postnatal), men, nurses, and traditional birth attendants (TBAs). This first chapter introduces the thesis, setting out the background and rationale for this study. This chapter also provides an overview of healthcare services delivery in Kenya and background to study settings.

Chapter two provides current literature related to ANC in the African context. It explores issues and factors related to utilisation of ANC services. This includes the views of men, women,[1] nurses, and TBAs. Focus is given to available literature on pastoralist women's use of ANC. This helped to identify the gap in the literature that informs the current research aim and objectives, as outlined at the end of chapter two.

Chapter three presents the philosophical approach and how it supports the aim of the study, and the study design (focused ethnography, FE). The chapter also focuses on the study design and data collection methods. The process of accessing the study field, participant selection process, and data analysis are explained. Lastly, ethical considerations and methodological rigour are presented.

[1] Female service users are referred to under the group 'women' in this thesis.

Chapter four describes the themes from interviews with women, on factors that influence their ANC experiences.

Chapter five presents the findings from three different significant community stakeholders in three sections: (A) nurses (B) TBAs, and (C) men. The findings from observations of clinics about ANC consultations is presented alongside themes on nurses' and women interviews, confirming or opposing what was narrated in nurses' interview data.

Chapter six integrates the findings from across the groups, and provides theoretical interpretations using a critical realist approach. The retroduction process explored the causal mechanism and structures that influence pastoralist women ANC use. The similarities, differences and any nuances across the group were highlighted and the themes presented as barriers and facilitators.

Chapter seven presents discussions on the study findings, evaluating the major issues that arise from the study findings in the context of the broader literature on ANC practices in Africa, paying attention to pastoralist communities.

Chapter eight, the final chapter provides a synthesis and summary of the study findings. Recommendations for policy guidelines, programme development, and future research are provided. Finally, the strengths and weaknesses of the study are highlighted.

1.2. Personal and professional motivation for the current study

I was fortunate enough to have had the opportunity to go to school and was among the very few females who attained a higher education in my community. I was born to a family that did not have the opportunity for education but have always encouraged my education and eagerness to aim higher. I am married to a husband who knows the value of education, and who has continuously welcomed and supported me through a professional career,

to the extent of encouraging me to venture abroad for this study as a requirement of the scholarship conditions, leaving him to shoulder our family responsibilities, including looking after two of our younger children. As a woman who was born and raised in a pastoralist community, where support for girls' education was limited due to many cultural factors (see section 1.4), I have an understanding of the challenges women face in the pastoralist community.

I worked in a maternal healthcare unit as a professional (not in the study region) and have always been interested and passionate about improving women's health, particularly among under-served ethnic minority groups. During the time, I secured a small amount of funding from a local organisation to undertake charity work to furnish a maternal health unit for pastoralist women, to allow them to access safer childbirth and support for neonates in Marsabit County. In addition, my professional experiences as a registered nurse presented the opportunity to explore the health-seeking behaviours[2] of pastoralist women.

While working in a maternal healthcare unit in one of the largest tertiary hospitals in Kenya, I organised ANC group sessions to provide pregnancy-related information to the mothers. During these sessions, I met women who shared both positive and negative experiences of their reasons for attending the clinic or not. Since most of the women in this particular ANC clinic had some level of education, the attitude and desire to access ANC clinic was generally positive, despite challenges, which were mostly related to economic issues. The women's eagerness and desire to access care was evident by the questions they asked. For example, they asked about nutrition in pregnancy, what they could do to prepare for childbirth, what danger signs to look out for, and many others. The women's concerns and desire to learn led to reflections such as: what about women in rural settings, particularly pastoralists in Marsabit County? What are the pastoralist women's understanding and

[2] Health or care seeking behaviour-imply any action taken by an individual who perceive themselves to have a health issue/need to find an appropriate solution. It is preceded by decision making process, which is influenced by multiple individual or communal factors (Oberoi et al, 2016). In current context of pastoralist women, it is also mean what makes them seek healthcare services.

experiences of the use of maternal healthcare services? What influences their attendance at ANC clinics? These pertinent questions and self-reflections on pastoralist women's health-seeking behaviours made me to realise that it is an important topic to explore. However, my specific interest was realised during the literature review, when no studies were identified regarding pastoralist women's ANC experiences in Kenya, and this was confirmed by the dearth of global literature on the topic.

1.2.1. Maternal health situation in Kenya, Marsabit County

Although global health organisations such as WHO are pushing to achieve the SDG target of less than 70 maternal deaths per 100,000 livebirths by 2030, with ANC access as a critical pillar of this (WHO, 2015), this seems a significant challenge in the context of developing countries. In Kenya the maternal mortality and morbidity of 366 per 100,000 live births (KDHS, 2014), and maternal health progress, remain low, significantly above the SDG target, as well as MDG target of 147 per 100,000 (KDHS, 2009, Njuguna et al., 2017, Okech.TC, 2016). In addition, the Kenyan Ministry of Health (MoH) reported that for every woman who dies during childbirth, an estimated 20-30 women suffer severe morbidity or disability due to pregnancy-related complications (Ministry of Health Kenya., 2015).

The study area, Marsabit County, comprises an 80% pastoralist population, and it has the fourth highest maternal mortality and morbidity in Kenya, at 1,125 per 100,000 livebirths. In addition, the County has the highest teenage pregnancy rates (1 in 5 by the age of 15 years) according to the United Nations Population Fund (UNFPA, 2014) and (KDHS, 2014, UNFPA, 2014). While it is beyond the scope of this study to explore the reason for high mortality and morbidity in pregnancy *per se*, identifying the factors that influence pastoralist women's ANC practices can shed some light on the problem of maternal health in Marsabit County. Similarly, when compared with other counties, the proportion of women making at least four ANC visit was low, for example 37% in Northern Kenya compared with 73% for Nairobi (KDHS, 2014).

Nonetheless, the general outlook for ANC coverage across the country showed little progress for the period 2007-2016, and this highlighted the need for further qualitative research (Gitimu, 2015, Maina et al., 2017).

To improve reproductive maternal neonatal child and adolescent health (RMNCAH) coverage (the antenatal care component of it), programmes such as Free Maternity Services (FMS), the elimination of user fees at primary care, and Beyond Zero Campaigns were initiated. These initiatives target reducing disparities across the Counties, by increasing healthcare service access by addressing challenges of supply and demand, and increasing the country's national development goals as enshrined in Vision 2030, and the SDG targets (SDGs 3, 5, and 10) (Matiang'i, 2018, Okech, 2016). The 'Beyond Zero Campaign' aims to promote maternal health services coverage through outreach mobile clinics across the 47 counties, including Marsabit County (Kenya Health Policy 2014-2030 (Ministry of Health-Kenya, 2014), and is intended to supplement existing programmes to provide ANC, postnatal care, and child immunisation services. However, due to financial constraints at the policy level, the quality of services are reportedly poor (Tama et al., 2017). Similarly, in 2018, the government launched the 'Big Four Agenda', which had Universal Health Coverage (UHC) as one of its key components aimed at providing affordable healthcare services to its citizens by 2022 (Wangie and Kandie, 2016, Development. Initiatives., 2019). Therefore, it can be argued that all these ambitious initiatives are aimed at realising UHC, with quality health services, which are geographically accessible to improve the health of those receiving services (WHO, 2010).

1.3. **Rationale for choice of study topic**

The UN Global Strategy for Women's, Children's, and Adolescent's Health (2016–2030) is committed to reducing pregnancy-related maternal deaths and stillbirths, which in 2015 numbered approximately 303,000 and 2.6 million per year worldwide. In addition, the Sustainable Development Goal (SDG) 3 focuses on ensuring healthy living and promotes well-being for all ages, with

women's health central to the goal (Ogundairo and Jegede, 2016). Together, these targets can only be achieved if pregnant women are given access to optimal care during pregnancy, and the intrapartum and postpartum period (Benova et al., 2018). While progress has been made to reduce maternal deaths and increase ANC coverage globally (Ag Ahmed et al., 2018, Moller et al., 2017), the literature confirms that this does not seem to be the case for pastoralist communities. As such, pregnancy experiences and factors influencing ANC experiences among pastoralist women, who are ethnic minorities, may differ from other ethnic groups and residents of urban settings (Ogundairo and Jegede, 2016).

There is a dearth of global literature examining the contextual issues experienced by pastoralist pregnant women, and the structures and mechanisms underlying their health-seeking behaviours (El Shiekh and van der Kwaak, 2015, Biza and Mohammed, 2016). In addition, despite making major contributions to pastoralist communities' lifestyles, pastoralist women have limited access to and control over productive assets, including livestock and land, as well as participation in decision-making, some of which directly affect their own lives (Kirupi and Ridgewell, 2008, Caulfield et al., 2016).

The current study focuses on women aged 15 and above. This choice was informed by the fact that one in five (17%) of the young women aged 15-19 years have begun childbearing, and half of the women in this County are married by the age of 18 according to Kenya Demographic and Health Survey (KDHS, 2014). Therefore, the assumption is that women aged 15 and above are likely to have experienced pregnancy, would possibly have used ANC services, and would be best placed to discuss their experiences and the factors influencing their use of ANC services. Secondly, as of 2015, Marsabit County had a population of 291,077, of whom women in the 15-49 years' reproductive age bracket equated to approximately 70,723, which according to the Marsabit County Integrated Development Plan (CIDP, 2013-2017) is expected to increase to 76,716 in 2017. Given maternal health issues in this County, as discussed later in this chapter, this population growth suggests

there will be an increased demand for maternal healthcare service, and a corresponding need to improve service delivery.

Considering cultural practices, gender and maternal health issues as discussed in section 1.4, in particular the high maternal mortality and teenage pregnancy in Marsabit County (KDHS, 2014), it is important to undertake research among pastoralist communities to explore women's ANC experiences and practices. Kirupi and Ridgewell (2008) report, on the 'double blind and exclusion of pastoralist women in the East and Horn of Africa', suggested that pastoralist women in Kenya are more likely to have childbirth before attending ANC clinics. However, there is limited evidence documenting factors influencing their access. This report suggests the need for an empirical study which explores the unique issues experienced by pastoralist women, to inform policy development and address their needs and challenges.

This doctoral study is the only known study to focus on the use of maternal healthcare services among pastoralist communities in Marsabit County. Its focus on this remote, hard-to-reach community, and pregnant women, in Northern Kenya, will add unique insights to the issues facing pastoralist women in sub-Saharan Africa. Additionally, the study aligns to the Kenya government's agenda on Universal Health Coverage (UHC), to make health services accessible to all the citizens through the County government (Achoki et al., 2019).

In order to place this study in context, the next section provides the background to the pastoralist community, bringing into focus the cultural and healthcare practices that provide the basis for this study.

1.4. Background and cultural practices among pastoralist community

Pastoralist communities are herders of domesticated livestock, with some incorporating agrarian agriculture alongside their pastoralism. Pastoralist community life is organized around the needs of their animals (Fratkin, 2001).

Due to issues related to their migration, cultural practices and conflicts, it is difficult to fully estimate a pastoralist population (Humanitarian Policy Group, 2010). However, in sub-Saharan Africa, it is estimated that there are approximately 80 million rural pastoralists, and in Kenya at least 5.6 million (Krätli and Swift, 2014). Pastoralists occupy 40% of arid or semiarid land, composed of grasslands, dry woodlands, and desert ecosystems (Notenbaert et al., 2012).

Pastoralists are divided into three groups: nomads, semi-nomads, and sedentary pastoralists. Nomadic pastoralists rear livestock for their own use and trade. They do not engage in agriculture, or have a permanent place to live, and tend to migrate in response to weather patterns. Semi-nomads engage with herding and farming, and sedentary pastoralists gain their main economic activity from farming, with limited seasonal movements, which mainly involves the migration of their herds of cattle, sheep, and goats (Omar, 1994). This doctoral study focuses on the semi-nomadic pastoralists, who temporarily settle around water points and have a tendency to migrate in response to the weather patterns. They mainly rely on livestock for their basic needs, and do not engage in any farming activities. They do not have permanent place to settle. (for more detail, see section 1.8).

Despite contributing significantly to the national economy through animal production, pastoralist communities tend to lack access to services and face long-standing marginalisation, exclusion, poverty, and vulnerability (Nassef et al., 2009, Schelling et al., 2008, Nyariki and Amwata, 2019). They are perceived by the government as ‘unsustainable and a barrier to development’, they lag behind in education, access to social amenities and healthcare services, and they have poor representation in government institutions, which also limits their power to bargain for service delivery (Kirupi and Ridgewell, 2008 pg 3). Their vulnerability is further compounded by climate change (persistent dry weather patterns), endemic tribal conflicts and increasing environmental conservation, which takes up part of their grazing land (Downie, 2011).

Hence, even the national level programmes targeting health and poverty eradication neglect the nomadic pastoralist population because of their 'perceived low priority and uncertain civil status', poor communication, and logistical challenges of outreach (Zinsstag et al., 2006 pg.565, Cohen, 2005). This largely explains pastoralist communities' poor or limited access to basic services. Although the authors did not categorically explain the 'uncertain civil status', this could be associated with their constant migration in search for pasture and water for their livestock, which sometimes takes them beyond the borders into neighbouring territories, and in terms of census and population records their numbers are difficult to quantify, hence resulting in poor service delivery (Zinsstag et al., 2006).

In most instances, these communities' access to basic services falls below the national well-being indicators (Downie, 2011). For example, among Kenyan pastoralists, the literacy rate is reported at 32.3%, compared with the national average of 79%, and antenatal care use is 66% in Northern Kenya, compared with 97% in other parts of the country (Downie, 2011, KDHS, 2014). This suggests that their healthcare needs are not being met. Indeed, as cited in Zinsstag et al. (2006), even the World Health Organisation (WHO), when calling for the strengthening of health systems for the underprivileged population, did not mention mobile nomadic communities, showing a lack of attention to these communities within the global health framework. In addition, although the WHO (2016) ANC recommendations for positive pregnancy experiences mention that the focus of the guideline is to include ANC access for all pregnant women, including ethnic and racial minorities, and those living in rural areas, it did not mention mobile pastoralist groups specifically.

The Kenya long-term development plan, Kenya Vision 2030, seeks to provide high quality and accessible healthcare for all Kenyans, yet it paid little attention to arid areas, which are predominantly populated by pastoralists (Nyanjom, 2014). In Africa and Kenya, several pastoralist policies have been developed: The African Union pastoral framework, national policies on arid and semi-arid lands and livestock marketing, and Kenya's Pastoralist Parliamentary Group (KPPG). However, these policies and reports lack proper organisation and

implementation to represent pastoralist communities (Jenet et al., 2016), and most seem to focus on environment conservation, biodiversity, and climate change (Notenbaert et al., 2012), with limited studies documented on maternal health, and none specifically on antenatal care access. There is no existing study that addresses the unique needs of pastoralist women ANC utilisation, considering the nature of their lifestyle.

In pastoralist communities, including Gabra (where the study was conducted), girls are considered a source of family wealth from a bridal dowry, leading to low school enrolment, dropout from school and early marriages, some of which are arranged, and some forced (CIDP, 2018, Kirupi and Ridgewell, 2008). Additionally, among pastoralists' communities of Marsabit County, traditional and cultural beliefs inform practices of pregnancy, childbirth, death, marriage, and funeral rites rituals across clans, and people are required to respect and follow these practices. Equally, high gender inequality, coupled with strong traditional practices informed by traditional laws, and unequal gender roles for women, tend to overburden, disadvantage, and disempower women.

As a result of deeply rooted cultural and religious beliefs there is a high prevalence of retrogressive traditional practices such as Female Genital Mutilation (FGM), which has become an integral part of the cultural construction of womanhood, influencing women's healthcare practices. In Northern and Eastern Kenya (of which Marsabit County is a part), the FGM prevalence rate of 97.6% is three times the national rate (Achia, 2014). Such retrogressive practices influence women's ANC and intrapartum experiences, due to fear, worry, embarrassment, and the likelihood of complications, such as bleeding and difficulty during childbirth (Achia, 2014, Moxey and Jones, 2016). Drawing from the KDHS (2014), women with FGM were found to be less likely to initiate ANC in the first trimester, nor did they make all recommended visits, compared with the uncircumcised group (Antabe et al., 2019).

The next section highlights the importance of, and challenges of ANC, and its coverage at a global level, and in sub-Saharan-African and Kenya in particular.

1.5. Background on maternal health

1.5.1. Global overview

Maternal health is an integral part of the Millennium Development Goals (MDGs) and a critical pillar of global development in the SDG-3 framework (WHO, 2015c). Despite efforts from the global community and significant improvements, maternal and child health still remain a global challenge, with two women dying every four minutes due to problems related to pregnancy and childbirth (Moller et al., 2017). In sub-Saharan Africa, a 15 year-old woman has a lifetime risk of 1 in 36 of dying from pregnancy-related causes, compared with 1 in 150 in Oceania; 1 in 210 in Southern Asia; 1 in 380 in South-Eastern Asia; and 1 in 4,900 in high income regions (Black et al., 2016). The majority of these deaths are from African countries, particularly among marginalised groups (Graham et al., 2016, Ngoma-Hazemba et al., 2018). Based on this evidence, the provision of early and good quality antenatal care may benefit both the mother and the unborn child, further preventing unwanted maternal and perinatal outcomes for 210 million pregnancies that occur yearly across the globe (Benova et al., 2018).

1.6. Understanding antenatal care: roles, importance, and challenges

Antenatal care refers to the provision of both medical and nursing care during pregnancy, including counselling and childbirth education (WHO, 2006), to ensure a healthy pregnancy and safer childbirth (Ekabua et al., 2011). Antenatal care is an important service that connects pregnant women and the family with the formal healthcare system, developing relationships with healthcare professionals (HCPs) and increasing the prospect for skilled attendance at the birth (Mbuagbaw et al., 2015, Ogundairo and Jegede, 2016). Antenatal care services provide the opportunity to detect pregnancy-related morbidities such as, anaemia, malnutrition, tuberculosis, and malaria

(Finlayson and Downe, 2013). Increased access and utilisation of evidence based early ANC in less developed areas, where the general maternal health is poor is linked to improved maternal and child health outcomes (Mason et al., 2015, Moller et al., 2017, WHO, 2016).

Although global progress has been made on early ANC coverage, a wide gap remains across the regions and countries (Moller et al., 2017). For example, the proportion of women making four or more ANC contacts ranges from 12% for Ethiopia to 78% for Ghana. These figures are consistent with findings from Kenya, which indicated that only 15% of women follow the guideline of starting ANC within the first trimester (Gitimu, 2015). This suggest a need for research to explore factors contributing to delay initiation of ANC clinic. A Cochrane review further added that a fewer ANC visits among women from low and middle-income countries (LMICs) was linked with an increased risk of perinatal mortality and stillbirth (Dowswell et al., 2010). However, these percentages on coverage do not necessarily reflect the quality of care that is provided (Benova et al., 2018, United Nations Children Fund (UNICEF, 2015).

1.6.1. WHO global guidelines on antenatal care service delivery

Over recent decades, in order to promote optimal utilisation of ANC, WHO has continuously revised and recommended a number of ANC guidelines which are followed across many low- and middle-income countries (Mchenga, 2019). Aligned to this, the organisation of ANC service delivery has gone through a transition process regarding models that guide practices. These include the Focused Antenatal Care (FANC) model, recent guideline based on positive pregnancy experiences, and the standard approach (high-risk-based). These models are explained below.

1.6.1.1. Focused antenatal care (FANC) guideline

The introduction of the WHO FANC guidelines in 2002 replaced the standard version with several ANC visits (between 7-16), which proved difficult for resource-limited settings (WHO, 2002). The focused ANC model, also known as goal-oriented ANC services, focuses on the quality rather than the number of visits, recommending a minimum of four ANC visits for women without medical conditions (Mchenga, 2019). The FANC model contrasts with the risk-based model, suggesting that every pregnant woman could be at risk of developing complications, and thus requires basic services and monitoring (Ekabua et al., 2011). The FANC model aims at providing specific evidence-based interventions, consisting of comprehensive evaluation, provision of interventions, and health promotion, organised across the four visits.

The FANC model has been associated with several positive outcomes, and it is considered a comprehensive, sustainable, and cost-effective approach, which seeks to reduce workloads and waiting times for both service providers and users (Callaghan-Koru et al., 2016). In Kenya, the model was linked to increased identification of existing conditions during the first ANC visit, which contributed to better plans for births, prevention of complications and postpartum counselling (Birungi and Onyango-Ouma, 2006). However, a Cochrane review which compared the reduced number of visits in FANC with the standard ANC model in low and high income countries found that women with already reduced visits (those in low income settings) are at increased risk of perinatal mortality, while women in other settings are less satisfied with reduced visits (Dowswell, 2015). This contributed to development of current guideline of minimum of eight contacts, as explained next.

1.6.1.2. Current WHO (2016) guideline

In 2016, WHO recommended a new set of evidence-based ANC recommendations. The recommendations on ANC for positive pregnancy

experiences suggest that pregnant woman make a minimum of eight contacts, to foster active connections between pregnant women and HCPs for improved health outcomes (WHO, 2016). These visits (contacts) could be achieved either at the static clinic-based ANC services, or at a community or household level, through outreach services, based on a country's context and health system structure (Benova et al., 2018 pg.2, WHO, 2016). The model is reported to provide a positive pregnancy experience, with a person-centred approach. This complements existing WHO guidelines, with the aim of reducing perinatal death, improving women's experiences of the care provided, and promoting safer pregnancy through regular contacts (WHO, 2016).

According to WHO (2016), the guideline is based on research evidence that showed increased foetal deaths and dissatisfaction with the four visits. The reason for increasing the number of contacts from four to a minimum of eight visits was to detect problems, improve communications, and increase contact with healthcare systems. This would provide supportive and promote positive pregnancy experiences. The model has 49 recommendations, under five broader concepts, including 14 items on nutritional interventions, eight on maternal and foetal assessments, five preventive measures, six interventions for common physiological symptoms, and six health system interventions for improving utilisation and quality of ANC. In addition, 10 routine recommendations from other existing WHO guidelines were included, and the regular ANC approach, applicable to all women was continued globally.

Table 1 shows a comparison of the FANC model and the current WHO (2016) additional recommendations regarding the number visits/contacts and key components of FANC. Since the FANC model is commonly in practice in Kenya's health system, particularly in study area, the table also shows the summary of the main activities recommended for the women.

Table 1: Comparison of ANC schedules and number of visits

<table>
<tr><th>WHO FANC model</th><th>WHO newly recommended model (2016</th><th>FANC main components</th></tr>
<tr><td colspan="2">First trimester</td><td rowspan="5">• Full History (psychosocial, medical, and obstetric history etc.)
• Complete general examinations
• Screening, tests, and treatment (Haemoglobin, Syphilis, HIV), urine test
• Preventive measures (Tetanus toxoid, Iron and folate, intermittent preventive treatment in pregnancy (IPTp) for malaria, provision of insecticide treated bed net, Antiretroviral drugs (if necessary)
• Health education, advice, and counselling</td></tr>
<tr><td>Visit 1: 8-12 weeks</td><td>Contact 1: up to 12 weeks</td></tr>
<tr><td colspan="2">Second trimester</td></tr>
<tr><td>Visits 2: 24-26 weeks</td><td>Contact 2: 20 weeks
Contact 3: 26 weeks</td></tr>
<tr><td colspan="2">Third trimester</td></tr>
<tr><td>Visit 3: 32 weeks
Visits 4: 36-38 weeks</td><td>Contact 4: 30 weeks
Contact 5: 34 weeks
Contact 6: 36 weeks
Contact 7: 38 weeks
Contact 8: 40 weeks</td><td></td></tr>
<tr><td colspan="2">Woman to return at 41 weeks if she has not delivered</td><td></td></tr>
</table>

Source: WHO (2016) antenatal care guidelines.

1.6.2. Model of antenatal care service delivery in Kenya

The MoH adopted the WHO focused ANC model with additional components tailored to the country's needs (KDHS, 2014). These additional components include the prevention of mother to child transmission (PMTCT) of HIV, intermittent presumptive treatment (IPT) of malaria, and individual birth plan (IBP) (Onyango-Ouma and Birungi, 2006). Others include prophylactic management of anaemia through provision of iron and folate, and tetanus toxoids (Mason et al., 2015) (see Table 1). In addition, maternal healthcare service delivery is guided by other relevant documents such as the National Guidelines for Quality Obstetrics and Prenatal Care, which provides comprehensive and detailed information on the provision of maternal care in Kenya (Ministry of Public Health. et al., 2002). The information on maternal and child health is also included in the *Mother and Child Health* Handbook

(MCHH), which all pregnant women are supposed to be provided on their first visit, as explained below.

1.6.2.1. Mother and Child Health Handbook *(MCHH)*

In Kenya, the MoH developed the *Mother and Child Health* Handbook (MCHH) (hereafter referred to as the handbook), a booklet with integrated information on maternal and child health are used as a patient record book by women and HCPs to monitor pregnancy and child health progress (Kawakatsu et al., 2015, Mudany et al., 2015, Takeuchi et al., 2016). The handbook was upgraded from a three-page clinic card to a 44-page booklet with detailed pregnancy and child development information. A colourful version of the handbook printed in English language with illustrations has detailed health information on pregnancy care, delivery, and child health history and immunisation schedule. The handbook is used during pregnancy and beyond, up until when the child is five years of age. It also relates the mother's health to that of the child in order to provide follow-up, and monitor both the mother and the child.

In addition to the MCHH, the MoH also provides other registration documents such as antenatal attendance registers, and educational materials to the health facilities that provide maternal and child healthcare services across the country for teaching, recording and monitoring ANC attendance. In Kenya, all healthcare facilities that provides ANC services are expected to provide the handbook to pregnant women during their first ANC visit, and the women are allowed to keep the handbook at home and present it to the health care providers during each ANC visit. The handbook has two main sections:

- *Section 1* has detailed information on maternal profile, including medical, surgical, general health information, clinical notes, ANC profiles and information on pregnancy care including nutrition, danger signs of pregnancy and information on preparation for childbirth, intrapartum and postpartum care and more.

- *Section 2* has information on child health and monitoring, including first broad physical examination, immunisation schedule, and growth monitoring chart until when the child is five years of age, and feeding information (Mudany et al., 2015).

The participants in this study repeatedly mentioned the significance of the handbook as gateway to accessing government services more generally. This kind of patient record has also been used widely in Asian countries and it has contributed significantly to utilisation of maternal and child health services (Mori et al., 2015, Takeuchi et al., 2016). Figure 1 is an example of a picture of some of information content in the handbook, indicating when healthcare should be obtained during pregnancy.

Figure 1: Example of educational component of the handbook



Source: *Adopted from* Mother and Child Health The handbook *(MoH,2016).*

1.7. Healthcare services delivery in Kenya

1.7.1. Overview

Kenya is in the Eastern part of African continent, with growing population of 45 million and varying level of socio-economic status (Achoki et al., 2019). Although Kenyan Government prioritise health as strategic sector in national development agenda, there is high disparities in healthcare access across the Counties (Netherlands Enterprise Agency, 2016). The most marginalised populations, with the 'worst' health outcomes are those from arid areas, largely occupied by pastoralists (Nyanjom, 2014 pg 43). For example, in Wajir County (Northern Kenya) only 12% of women received skilled birth attendants, compared with Nyeri County (Central Kenya) with skilled attendance of 97%. As earlier explained in section 1.4, this could be linked to their pastoralist lifestyle of mobility, rendering healthcare access a challenge.

In 2010, Kenya promulgated the new Constitution that led to the creation of two levels of governments. The two levels are the national government centrally place in the capital city (Nairobi), and 47 County governments. The purpose was to devolve services including healthcare service delivery as a means to enhance efficiency and increase access to services. Healthcare services are largely a devolved function according to the Kenyan Constitution. The two levels of government are different but collaborate with regard to service delivery. The national government through the Ministry of Health has responsibilities for setting out health policy, providing national referral health facilities, capacity building and technical assistance to the Counties. Provision of primary healthcare services and the recruitment of HCPs is the responsibility of the County governments (The Government of Kenya., 2008, Ministry of Health-Kenya, 2014)

Kenya health sector is a mix of private and public sector services. The healthcare system is well developed especially the private sectors (see Figure 3) (Netherlands Enterprise Agency., 2016). However, the majority of these healthcare facilities are located in urban areas, with rural populations having

limited access to healthcare services. The healthcare system is structured in a hierarchical manner, with primary healthcare at a community level (Level 1). This level provides health promotion and preventive services provided by CHWs, and Community Health Extensions Workers (CHEWs). The next levels (2 and 3) are the dispensaries and health centres that also provide preventive and curative services, including maternal healthcare services (ANC included) (Mason et al., 2015). Registered nurses and clinical officers respectively manage these levels. Levels 4 and 5 hospitals are at a County and sub-county level and provide comprehensive healthcare services. Maternal health problems that require specialised care are transferred to the higher level; the national hospitals (level 6) (see Figure 2). In addition to other medical services, the national referral hospital (level 6) provide complex diagnostic, therapeutic and rehabilitative services, and teaching facilities.

1.7.2. Different cadres of healthcare workers in Kenya

In Kenya, there are different cadres of HCPs with different training periods and expected competencies to provide healthcare services. They included medical officers, clinical officers, nurse/nurse midwife and others allied healthcare workers (Ministry of Health Kenya, 2017). Medical officers are at the highest level of training in Kenya. Clinical officers are mostly based in rural areas providing healthcare at the health centres. They are non-physicians with three years training and one and half years of pre-service training in clinical medicine to provide critical care services. Clinical officers can perform minor surgical procedures after post-basic training. For the nurses the lowest level being certificate (enrolled nurses) and the highest level at Master's degree. Midwives are trained at degree level for two years' post-diploma training and specialty at Master's level. To mitigate the shortages of professional health care providers (HCPs), the government employed non-professional health personnel who provide supportive roles in the rural area, mainly health promotion. They include CHEWs and CHWs who are provided basic training

through organised workshops and supportive supervision. Table 2 below shows key cadres and the levels of service delivery. Figures 2 and 3 show health system organization and facilities in Kenya (respectively).

Figure 2: Kenya health system organisation

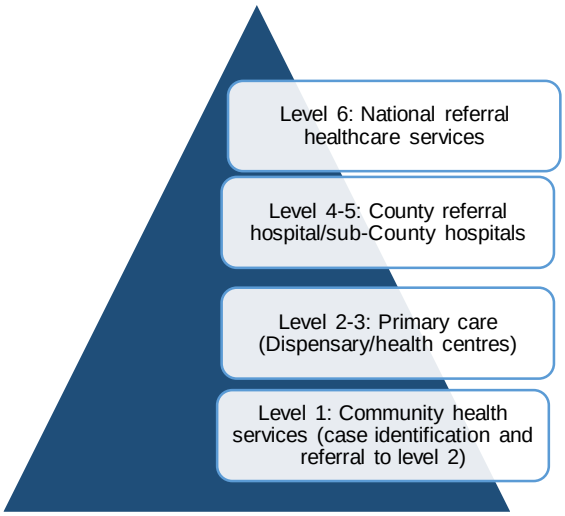
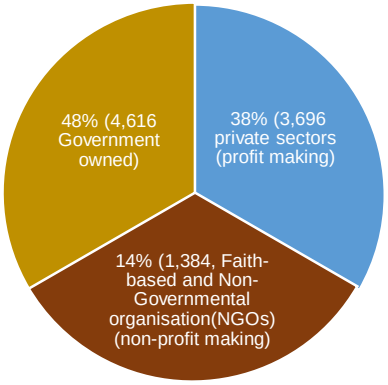


Table 2: Key cadres of healthcare services providers and roles

Different cadres	Level of practice in healthcare services	Roles
Medical officers (physicians)	Level 4-6	Clinical medicine and the roles depend on level of specialty, e.g. paediatrics, obstetrics, and gynaecology etc.
Clinical officers	Level 2-6	Provide critical care Minor surgical care At level 3 oversees the facility activities
Nurse and nurse midwife	Level 1-6	At level 2 to oversee and provide both curative and healthcare services promotion and provision and managerial roles.

Figure 3: Healthcare facilities in Kenya



Source: Report by Netherlands Enterprise Agency (2016)

1.8. Study setting: Marsabit County

The study was conducted in Marsabit County. It is the largest in terms of land mass, and sparsely populated with a population density of four persons per square kilometre. Administratively, the County is divided into four sub-counties: Saku (Marsabit central), Laisamis, North Horr and Moyale. The County has one level 5 (County referral hospital) and three level 4 sub-county hospitals, located in Moyale, Laisamis and North-Horr sub-counties. The level 5 hospital provides comprehensive medical services and referral to the level 6 (Kenyatta National hospital) for all health conditions that need specialised

care. At the time of this study, there were 56 dispensaries and 16 health centres across the County.

Marsabit County has four major tribes, Gabra, Borana, Rendille and Burjis. The pastoralists' communities are mainly Gabra, Rendille and Borana. The other communities include Burji, Garr and others are farmers and traders. The Saku town is mostly multicultural, but the pastoralists groups who live in the periphery are Borana, Gabra and Rendille. These groups practice both nomadic pastoralist and semi-nomadic type of pastoralism. This study was mainly conducted among Gabra community. This decision was purposive as they are largely pastoralists. In addition, since the researcher is a native of the area, this contributed to easy access coupled with an understanding of the local dialect for easy interaction and the research sites were convenient. However, the researcher considered the effect of such positionality on the study process and outcomes (see Chapter 3; reflexivity section 3.9.2).

Marsabit County experiences unreliable rainfall and frequent droughts that lead to herds and at times human migration in search for water and pasture. Although the majority of the pastoralists' communities in Marsabit County are historically mobile, some have adopted semi-nomadic lifestyles and have settled around a small settlement (town) temporarily to access water points and infrastructures such as (schools, churches, dispensaries, and shops). The current study considered this type of settlements as the core unit. However, they have tendency to migrate depending on weather patterns. The researcher visited the villages around Saku/North-Horr sub-Counties for data collections. Some of the villages are in North-Horr sub-county according to jurisdiction of the County mapping.

Maternal healthcare service delivery in Marsabit County is provided at level 2-3 by registered nurses/midwives, and clinical officers (CO). Nurses provide maternal healthcare including ANC services, normal deliveries, and postpartum care, unless there is need for referral to the higher-level services. The County's maternal health situation is reflected in some of the key indicators shown in Table 3. Appendix 13 shows Marsabit County map.

Table 3:Indicators of Marsabit County maternal health status compared with national average

Selected indicators	Marsabit County	Country (National)
Population	340,171	45,108,414
Health facilities (public)	72	4,929
Female population (15-49 years)	76,716	
Education (school enrolment)	Primary 10.3%(completed) Secondary (4.3%completed) No education (61.9%) Women 64.5% (no education)	Primary 88% (completed) Secondary 47% (completed)
Female Genital Mutilation	Over 90% (15-19 years)	12% (15-19 years)
Skilled birth attendance	26%	62%
Antenatal care visits (+4)	43%	62%
Maternal mortality ratio (per 100,000 live births)	1,127	366

Source: Kenya Demographic Health Survey (KDHS, 2014), CIDP (2018).

1.8.1. Study site

The study was conducted in six villages and five dispensaries in Marsabit County. The community living in these villages are homogenous in their cultural practices and language. In qualitative research, consideration of small geographical setting is related to resource constraints and for in-depth understanding (Ritchie and Lewis, 2003). The current study's choice of the villages and the dispensaries were purposive, considering the participants' pastoralist lifestyle, and it was easy to get to the sites within this locality.

1.8.1.1. The village

The villages, commonly referred to as manyattas/olla (local terms for 'villages'), have a small number of homesteads with huts made of temporary detachable materials made from small carton boxes, animal skins, and woven sisal mats, which protect families from wild animals and harsh weather

conditions (Figure 4). These huts are easy to dismantle and reconstruct during migration, which is exclusively women's role. The study was conducted among the Gabra community which is the largest group in terms of populations. They mainly depend on animals as their source of livelihood, hence, migrate depending on the weather pattern. Each village has an elder (gatekeeper). During data collection, I had to inform the village elder about the study. Most of the villages are over 40 kilometres out of town and are similar in terms of their settings and cultural practices. During the study period, I resided in the town and travelled to the villages and the health facilities for data collection. There were challenges of terrain, harsh weather, and the cost of the travel. Therefore, I tried to minimise the impact of these constraints by spending most of my day at the dispensaries to avoid multiple travels in the day, and performing observations and interviews as scheduled, however, some constraint remained. Figure 4 is representative of the study sites, showing a typical Gabra village.

Figure 4: A typical Gabra manyatta (village)

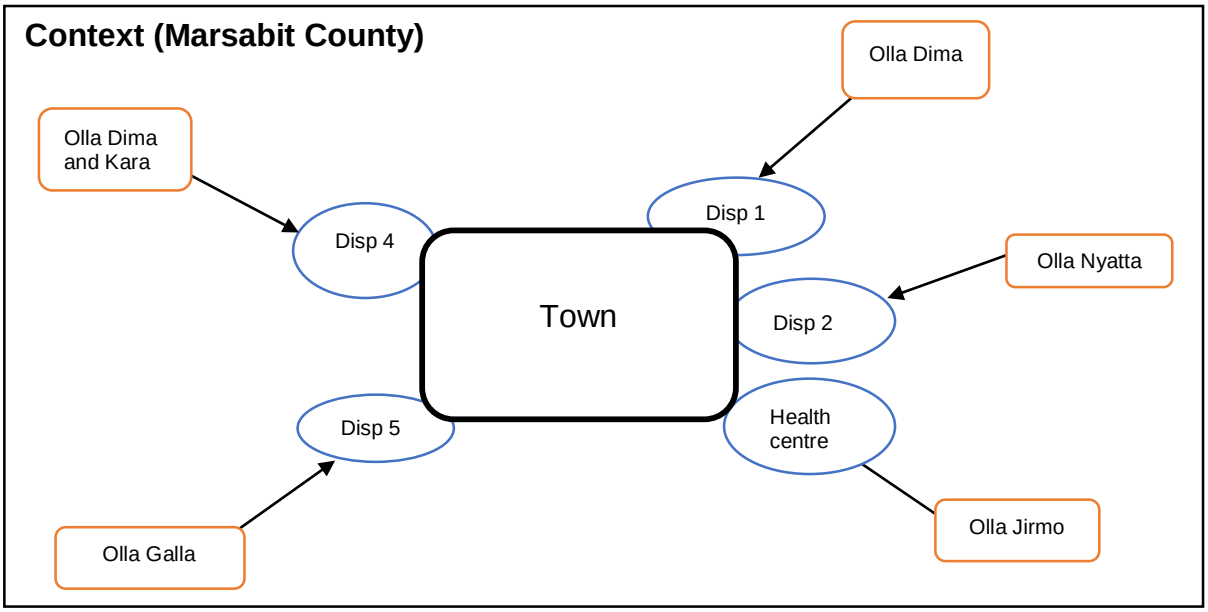


1.8.1.2. Dispensaries

In Kenya, a dispensary (disp.) is the lowest level of healthcare service provision in the public health system, and the first point of contact with women/other clients. At the dispensary, a registered nurse provides a range of services including general medical consultations, drug prescriptions and administration, immunisation programs, family planning and maternal healthcare (including antenatal care) among other services. There were four dispensaries and a health centre included in this study. A health centre is the second level of service delivery that provides comprehensive care including preventive and curative care. The referral of patients from a dispensary is done either through health centre or directly to the sub-county or County referral hospital. These health facilities are at the periphery of the town to provide services to the population outside the larger settlement.

A typical day in a dispensary starts at 9am and ends at 4pm, Monday to Friday. On Saturdays both the dispensaries and health centre opened for a half day, morning until noon. On Sundays, the facilities remain closed, however, in case of any medical emergencies or pregnancy-related issues, nurses were contacted through either community elders or CHWs. There was only one nurse per dispensary and health centre, who provides services to all patients and the pregnant women. The health centre was supposed to have two nurses and a clinical officer, however, during the observations at the clinics only one nurse was found at the health centre, as others were either on annual leave or attending training courses. Generally, few patients and pregnant women were noticed at the health facilities during field visits. The physical structure such as the seating arrangements were similar across the dispensaries with two long benches mounted along the corridors at the waiting area. All the dispensaries where the study was conducted were public sector affiliated to the MoH. Figure 5 illustrates the relation between dispensaries and settlements. However, it is important to note that this setting, particularly of the villages could change constantly as the villages migrate due to their pastoralist nature of living.

Figure 5:Illustration of study sites: dispensaries and the villages



Note: *Olla Jirmo is closest to the health centre, at 10km, while Olla Dima and Kara are the furthest distance at over 40 km.*

1.9. Conclusion

This chapter introduced the context of the current study and background to the study setting. It started by describing the background to the pastoralist community, maternal health globally and a brief description of the WHO guidelines on ANC and the current practice in Kenya. The chapter then concluded with the overview of the context in which the study was conducted to provide picture of study settings. The next chapter focuses on the relevant literature on ANC practices in Africa to identify the gaps in this area among pastoralist communities.

CHAPTER 2
LITERATURE REVIEW

2.1. Introduction

This chapter critically reviews existing literature on factors influencing ANC experiences and practices in African countries, with a specific focus to identify gaps in evidence among pastoralist communities. The chapter describes how the reviewed literature informs the current study's aims and objectives, and the research questions. The term access in this study refers to factors that either facilitate or impedes ANC use (Andersen, 2014).

2.2. Literature search strategy

2.2.1. Type of literature review and search process

In May 2017, and subsequently again in September 2017 a comprehensive systematic narrative literature review was conducted in several databases. A narrative approach is comprehensive and text-based, generating insights about phenomena of interest unlike quantitative reviews that show common metrics and test theory by statistical meta-analysis (Snilstveit et al., 2012, p.414). In current study, a narrative approach enables the synthesis of multiple forms of evidence, establishing the relationships between them and by presenting key concepts and themes narratively (e.g. to tell a story that relates directly to your research objectives). Search terms were formulated using the SPIDER framework (sample, phenomenon of interest, design, evaluation, and research type) as it was better approach for generating search terms for qualitative and mixed method studies and more suited for qualitative research questions (Cooke et al., 2012). See Table 4, the inclusion and exclusion criteria of the studies. The aim of the search was to identify studies related to experiences, perspectives, understandings, opinions, knowledge, views, or perceptions on ANC services use among pastoralist communities specifically,

and in African populations more generally. Databases including ASSIA, CINAHL, MEDLINE (via Ovid), PsycINFO (via Ovid), and PubMed Central were searched for literature, since they cover a wide range of topics which are relevant to several disciplines nursing, social sciences, midwifery, and medicine etc. Using the search terms (see Table 5), a search was conducted for each group separately (e.g. women, men, TBAs, and nurses) in the selected databases (see Appendix 10 for the search strategy).

Key words such as 'antenatal care', 'pregnant woman' 'qualitative studies' and 'pastoralist' were included in the search terms for the articles from Africa. Truncation symbols such as (*) were used for terms with alternative spellings. The initial search identified a sizeable literature related to factors influencing maternal healthcare services in Africa. Amongst the wider search, I looked specifically for studies among pastoralist community on ANC, but none were identified.

The search for published literature yielded a total of 2621 potential papers for all groups, which were screened for their titles and abstracts. 1733 articles were excluded according to the inclusion and exclusion criteria. EndNote X8 helped to removal of duplicates. Subsequently, 61 papers were read in their full-text version, from which a further 43 papers were excluded, and the remaining 18 papers were selected for review. In addition to database searching, I also reviewed the reference list of the identified studies and a meta synthesis (Finlayson and Downe, 2013). Five articles were identified from the reference list of a meta-synthesis, and 14 studies from reference lists of articles identified, and one study from Google web and Google Scholar on agro-pastoralists (engaged in both agrarian farming and rearing livestock) were identified (Ogundairo and Jegede, 2016).

A summary of how articles were included is presented in a flow chart (Figure 6). In addition, other published reports and guidelines retrieved from Google web, Google Scholar, and other international and national (Kenyan) websites, such WHO, Government of Kenya demographic sites, and webpages were included. Since the study focuses on the views of men and women, there were no restrictions on age and gender, and any age for pregnant women was

included, given that background data indicated high teenage pregnancy rate among pastoralist communities in Marsabit County (see section 1.2.1). In total, the literature review included 33 primary studies conducted in Africa. The review only considered articles published in the English language due to limited funding for translation from other languages to English.

The following SPIDER parameters were developed to meet the inclusion and exclusion criteria for the selection of papers for the narrative literature review.

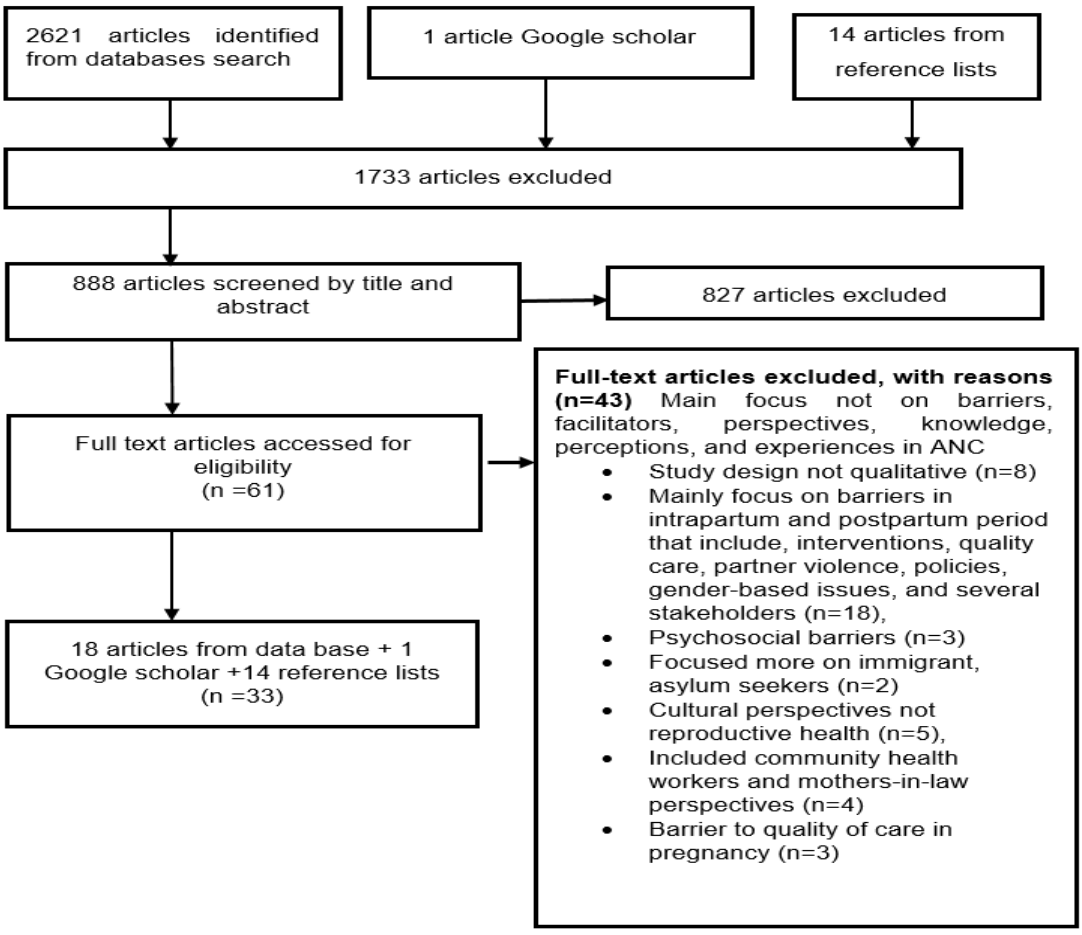
Table 4: Studies inclusion and exclusion criteria

	Inclusion	**Exclusion**	**Rationale**
Sample	Studies with pregnant and postnatal mothers, TBAs, men and nurses from African countries, particular focus on pastoralist communities.	Studies with pregnant women from developed countries.	There is limited data on studies that included pastoralist communities.
Phenomenon of Interest	Studies with barriers and facilitators to ANC access, specifically among pastoralist, living in rural settings.		Studies on barriers on pastoralist communities ANC access are limited.
Design	Studies with qualitative interviews, focus group discussions, participants observations, ethnographic research and thematic analysis	Studies with questionnaires or survey	Inferential statistics not used in qualitative studies, limit richness of the study and analysis (Cooke et al., 2012)
Evaluation	Studies with ANC experiences, views, opinion, beliefs, understanding, knowledge and attitude	Studies with experiences at intrapartum, unless ANC experience was significantly mentioned.	The current study specifically focused on ANC experiences. Although few studies have been documented on barriers and facilitators at intrapartum among pastoralist (Caulfield et al., 2016, Wako and Kassa, 2017). None during antenatal period.
Research type	Studies with qualitative and mixed method approach	Studies with quantitative approach	

Table 5:Search terms

Terms	Search terms
Sample	
Pregnant women	Antenatal mother* antepartum, pregna*, prenatal, pre-partum, ante-natal, expectant woman, pregnant woman, pregnant girls
Qualified nurses	Nurse*, midwives*, skilled birth attendants, professional health worker.
Traditional birth attendants	Traditional midwife, community midwife, traditional birth attendants, traditional birth assistant, community birth helper
Husbands	Men, spouses, husband*, partner, male partner, intimate partner, male
Phenomenon of interest AND interventions	Barriers OR facilitators AND Antenatal care services OR antenatal interventions OR antenatal assessment OR antenatal counselling OR maternal healthcare OR evidence-based interventions OR community-based services) AND (pastoralist communities OR marginalised community OR nomadic community OR rural OR Africa)
Design	Qualitative interviews OR FGDs OR content analysis OR thematic analysis OR ethnographic research OR participants observations
Evaluation	Perceptions OR perspectives OR believes OR knowledge OR experiences OR understanding OR opinion OR attitude OR views
Research type	Qualitative studies OR meta-synthesis OR mixed method studies

Figure 6: Flow chart of studies included



2.2.2. Description of included studies

All 33 studies in the literature review were conducted in African countries, between 1990-2017. The studies reported women's ANC experiences, and the views of men, TBAs, and health care providers. The studies focused on those living mainly in rural settings, although peri-urban and urban settings were captured, and comprised 15 African countries. Aside from Kenya, the studies were mostly from Ghana, Mozambique, Nigeria, Rwanda, South Africa, Sudan, Tanzania, and Uganda. All these studies shared the aim of examining the barriers and facilitators to maternal healthcare services, particularly ANC services in general, but no study specifically focused on pastoralist women. The studies had mixed populations, including pregnant women, husbands, TBAs, mothers-in-law, and health care providers, including nurses. Twenty-one studies included views of all these stakeholders, eight studies concerning the views of women (pregnant and postnatal), while two studies each explored the views of men and of TBAs. Therefore, the literature review was structured thematically, instead of per group, so that the group experiences were not lost if the studies were discussed separately. Also, there were similarities in relation to themes across the groups.

A wide range of study designs and data collection methods were included, namely ethnography, qualitative case study, interviews, focus group discussions (FGDs), and participant observations. The methodological assessment of quality of the included studies was conducted using the Critical Appraisal Skills Programme (CASP, 2017) appraisal tool (see Appendix 9). All studies, irrespective of quality were included in the literature review. This was because the purpose of the process was not to exclude studies but highlight methodological gap. Some of the studies were quality graded as low, with some limitations, including inadequacy of reporting on recruitment strategies, ethical consideration, and data analysis technique. In one study (Cheptum et al., 2014), the recruitment process, data analysis, and presentation of the findings were inadequate. The summary of the characteristics of the included studies is presented in a table in Appendix 8.

2.2.3. Data extraction and synthesis

Data extracted from the 33 full studies was tabulated into six columns, to include information on study settings, participants, methods, findings, recommendations, and study limitations (Appendix 8), and the narrative description was conducted. The synthesis of these studies generated three themes that influence ANC access: (i) impact of socio-cultural practices on ANC access; (ii) gender roles, relationships, and decision making; and (iii) healthcare system and economic barriers to access ANC, as shown below:

(i) Cultural beliefs and practices related to protecting pregnancy acted as barriers to engaging with ANC services.

(ii) Access and utilisation of ANC services is influenced by social relationships (e.g. support and approval from men and TBAs), gender roles and decision-making ability.

(iii) Access and subsequent use of ANC is influenced by the general context (e.g. health system barriers such as-lack of resources, experiences, and interactions, environmental barriers such as transportation, cost, and unavailability).

Despite the existence of evidence on factors influencing ANC uses across Africa, the literature review identified a gap in the literature among pastoralist communities, who are the focus of this current doctoral study. The literature review suggested three key areas that are important in influencing ANC practices, which hence structured the discussion of the literature. Firstly, the impact of socio-cultural practices on ANC; secondly, gender roles, relationships, and decision making; and finally, health systems and economic barriers. This chapter concludes by elucidating the key gaps in literature, informing the research aims and objectives.

2.3. Impact of socio-cultural practices on ANC in Africa

The influence of sociocultural beliefs and practices on pregnancy disclosure and ANC access has been widely debated in literature. These are synthesised under two thematic sub-headings: (i) protecting pregnancy: beliefs and practices; and (ii) teenage pregnancy and ANC use.

2.3.1. Protecting pregnancy: beliefs and practices

It has been widely acknowledged for decades that cultural beliefs influence women's health-seeking behaviours during pregnancy, as pregnancy is viewed as a healthy physical state that warrants little need for seeking healthcare services (Azuh et al., 2015, Chapman, 2003, Finlayson and Downe, 2013, Glei et al., 2003). These beliefs are further compounded by religious beliefs that can discourage the use of medical interventions. There is a tendency in many cultures to view traditional medicine as more appropriate for pregnancy-related problems, and there is a perception that attendance at ANC is more for curative than preventative purposes. Thus, keeping the pregnancy at home is preferred where possible (Roberts et al., 2017).

In freely available ANC services in Mozambique and South Africa, interviews with women revealed that delays and underutilisation of ANC were strongly linked to cultural beliefs. These beliefs viewed pregnancy as a socially risky state, requiring protection from maleficence, including sorcery and witchcraft that would lead to pregnancy loss. Conversely, there is also a perception that pregnancy has no threats, with a preference for alternative medicines to manage pregnancy-related conditions and maintain good health (Chapman, 2003). Such perceptions contributed to women visiting the ANC clinic at the seventh month of pregnancy, and then only to obtain the ANC card, which was considered necessary in cases of obstetric emergency, even though they did not intend to have childbirth in clinical health facilities (Chapman, 2003).

Although these two studies were conducted almost two decades ago, the findings still hold true, as affirmed in the qualitative findings by Munguambe et al. (2016) who held individual interviews and FGDs with multiple participants, including pregnant women, men, mothers-in-law, TBAs, and health care providers, to explore factors influencing women's health-seeking behaviours during pregnancy. It was revealed that a fear of pregnancy loss, even if women recognised the benefits of healthcare services, led to delays to access ANC services. Both the Chapman (2003) and Munguambe et al., (2016) studies were conducted in Mozambique; although conducted over a decade apart, they both showed that cultural beliefs and practices profoundly influence ANC use. From these findings, it can be concluded that provision of ANC services without addressing the fundamental cultural barriers related to early pregnancy disclosure, and fear of potential pregnancy loss, are major inhibitors for women to exercise their agency, and engage with ANC clinics. This clearly demonstrates that cultural beliefs and practices control decision-making about pregnancy care, as evidenced by these studies which were held many years apart, yet the findings remain the same.

Surprisingly, besides confirming the above findings, Roberts et al. (2017) found in Malawi that health care providers (physicians, midwives, and clinical officers) shared similar beliefs about pregnancy care and disclosure, tending to discourage early ANC visits. This qualitative study conducted in an urban setting involved twenty pregnant women and eight health care providers. It explored cultural beliefs that influence ANC practices and pregnancy-related decision making. Cultural beliefs and practices that inhibit women's ANC use include beliefs about the need for healthcare only during sickness, practices of seeking spiritual protection from religious leaders, 'not looking back' to avoid harming the unborn child, and cultural beliefs about infidelity that might lead to miscarriages, hence health care providers discouraged early disclosure because of such beliefs. By combining the perspectives of women and health care providers, these two studies (Munguambe et al., 2016, Roberts et al., 2017) provide a picture of how normative expectations shaped health care providers' roles of provision of care and women's experiences and practices of ANC even when pregnancy is recognised both in rural and urban settings.

This implies that cultural and religious beliefs can significantly influence health care providers themselves, and women's agency to make decision about pregnancy care is considered in terms of protecting women and the health of the unborn child. It also appears that such beliefs and fears are metaphysical in nature. According to a Ghanaian and Gambian studies by Dako-Gyeke et al., (2013) and Stokes et al., (2008), in most cases these are related to the fear of sinister forces such as sorcery and the evil eye, which inhibit timely ANC visits. It was concluded that health systems should consider providing psychosocial support to women to allay fears related to pregnancy disclosure.

In addition, for Fulani women of Nigeria who participated in an ethnographic study, multiple cultural expectations influenced their ANC use. These included a fear of being examined by 'strangers', practices of pain-suppression, a culture of shyness, and the perceived insensitivity of health care providers to their culture (Ogundairo and Jegede, 2016). This suggests that ANC use among Fulani women is compromised by cultural factors whereby the process of socialisation is deeply entrenched in pregnancy care practices and expectations to preserve the culture, hence influencing health-seeking behaviour and engagement with ANC. Such barriers– on the part of insensitive health care providers as well as internalised beliefs among the women prevented them from the benefits of early engagement and provision of evidenced-based ANC services, including improved maternal and foetal health outcomes (Mason et al., 2015, WHO, 2016).

The common thread in the abovementioned studies is that cultural beliefs and practices strongly influence women's health-seeking behaviours in Africa. From these studies, one can conclude that women and community members view pregnancy as both a healthy physical state, and a position of social risk requiring protection from exposure to public contexts. Hence this presented little reason for them to access clinical care, when they perceived no threat to the pregnancy. Thus, two arguments can be deduced about pregnancy care practices among women in Africa. First, the delay in using or not using ANC services and interventions suggests that although women experience pregnancy as individuals, they still belong to social groups (communities) and

cultures that influence their health-seeking behaviours, including pregnancy disclosure, early engagement with ANC clinic, and acceptance of ANC services, as demonstrated in all of the above studies. The second argument could be that although women recognised biomedical pregnancy needs, they may have feared cultural and religious consequences of not following the beliefs and practices, leading to pressure to accept and uphold the culture to protect the pregnancy as culturally endorsed, hence leading to underutilisation of ANC services.

2.3.2. Teenage pregnancy and ANC use

As parents and society often disapprove of teenage pregnancy in the African context, their effort to access healthcare services is limited due to factors related to social stigma (Owusu-Addo et al., 2016). Owusu-Addo et al. (2016) conducted individual interviews and FGDs among teenage pregnant women aged 15-19 years in Ghana to explore their health-seeking behaviours. The study found that teenage pregnant mothers lack knowledge of pregnancy care, they are stigmatised, to the extent that some parents and relatives suggested that they procure an abortion. This attitude affected their health-seeking behaviours. Social isolation from the community, and intimidation from older pregnant women and inadequate support from health care providers, further delay the initiation of ANC.

At the community level these challenges negatively influence teenage mother's agency to make decisions about their pregnancy care, and they are also subjected to a lack of health professional support at the health facilities, according to a qualitative study from South Africa (James et al., 2012). These include being judged and embarrassed about being pregnant while still young, and without support teenage mothers have a sense of feeling uncared for, and being compared with older women, as health care providers remain insensitive to their needs and concerns. This in turn leads to non-attendance at ANC clinic, and resorting to seeking pregnancy-related information and care from traditional sources including their mothers, friends, and TBAs. This lack of

information and support implies that teenage mothers are left unprepared for pregnancy, suggesting increased risk of negative pregnancy-related outcomes (WHO, 2015a).

However, both James et al. (2012) and Owusu-Addo et al. (2016) concluded that social support, such as the encouragement of teenage mothers' attendance at ANC by family members, policies that guide and separate ANC clinic days from older pregnant women's clinic days, and an understanding of the health information needs of the teenage mothers would provide a buffer to such challenges, and promote ANC use among teenage mothers. Also, the *WHO Global Strategy for Women's, Children's and Adolescents' Health (2016-2030)* provides a comprehensive guideline for adolescent health and development, including supportive parenting, health education, and psychosocial support among others (WHO, 2015a).

These studies exposed the challenges teenage pregnant mothers faced to access ANC services, most of which are socially constructed, and which influence health-seeking behaviours. However, the studies only explored the views of the pregnant teenage mothers from urban settings (i.e. among those who attended ANC clinic), and among those who would generally have better access to healthcare. Thus, including teenage pregnant women from villages may yield different perspectives, which is one of the gaps that the current study addresses.

In summary, from above section, although there is significant evidence showing socio-cultural influence on women's ANC practices, the limited literature among pastoralists make it difficult to understand if such beliefs and practices are similar for pastoralist women, as cultures differ from one region or ethnic group to another (Ogundairo and Jegede, 2016).

2.4. Gender roles, relationships, and decision to use ANC

This section describes how gender related roles and relationship between men, women, and TBAs influence women health seeking behaviours, particularly how gender roles and decision-making impact of ANC use in Africa context. The section also addresses TBAs' views and roles in women ANC use.

2.4.1. Role of men and decision to access ANC

In sub-Saharan Africa, particularly in rural communities, gender inequality has been demonstrated to have negative influences on women's access to maternal health in multiple ways, including in pregnancy care, healthcare visits, and childbirth, all of which are seen as women's roles and responsibilities, in which men have limited input (Adjiwanou and LeGrand, 2014, Kululanga et al., 2012, Kwambai et al., 2013, Qureshi et al., 2016). Additionally, in many African countries, men are key decision-makers and providers of family resources, often determining women access to economic resources. This in turn affect women's control over resources, leading to the disempowerment of women to make decisions to access healthcare services (Morgan et al., 2017, Singh et al., 2014). This was reflected in a qualitative study from Gambia that showed women experienced heavy duties related to household chores and heavy farm work throughout the pregnancy period, even during illness, and limited access to and control over resources (Lowe et al., 2016). They also had little support from their husbands due to cultural beliefs on the gendered division of roles. This caused the women to feel disempowered, leading to limited access to maternal healthcare services, including during pregnancy and childbirth, which was associated with related high maternal mortality rate reported in Gambia (Lowe et al., 2016). In Uganda, although women strongly desired their husband's participation and support during pregnancy, this was limited due to cultural beliefs that pregnancy care is women's role and limited understanding of the benefits of accompanying women to ANC clinics (Singh et al., 2014).

Contrary to findings from Gambia and Uganda, men in Kenya were found to have some understanding of ANC, a positive attitude towards ANC use, and demonstrated willingness to financially support and encourage their wives to attend ANC clinics (Kwambai et al., 2013). This study involved FGDs with 68 men aged 20-65 years to explore their perceptions of ANC and barriers to and facilitators for them to participate in ANC clinic. The study also revealed that men wanted to seek first-hand information about pregnancy, and to know their HIV status. However, a few barriers limiting their desire for participation and provision of support exist, including the traditional norms whereby men are excluded from pregnancy care (they noted that women tend to discuss pregnancy issues with their mothers, mothers-in-law, and female friends), with their wives withholding information about the services received, unconducive clinic environment, other competing responsibilities and negative attitudes from the health care providers (Kwambai et al., 2013).

As such, Nesane et al. (2016) suggested the need for strategies to address the knowledge gap among men on their roles to improve ANC uptake, particularly in South Africa. Suggested strategies included health education through community outreach services, facility-based health promotions and counselling services, provision of waiting rooms for couples, and encouraging men to take part in ANC services. These recommendations were premised on the findings that men lack knowledge, particularly on danger signs of pregnancy, coupled with the cultural beliefs that men have no roles during pregnancy. In addition, social embarrassment of involving in house chorus and accompanying women to clinics and hence failed to provide support for women during their pregnancy (Audet et al., 2016, Lowe et al., 2017). For instance, due to a lack of knowledge, and the belief that pregnancy care is a women's role, it was established that some men accompanied wives, but would stay outside the ANC clinic environment for long hours while women were provided the services (Nesane et al., 2016).

It has also been shown that in some sub-Saharan Africa countries, the gender issues on who makes decisions often demonstrate that women have little say even on decisions that affect their own health. Studies have found that men

generally make decisions regarding family affairs, including use of resources and decisions to access healthcare services during pregnancy and childbirth (Ngom et al., 2003, Pembe et al., 2008, Umeora et al., 2008). Ngom et al. (2003) refer to this as 'gatekeeping', whereby the head of the household (i.e. husband or father) control economic resources, hence limiting timely access to healthcare services.(Pembe et al., 2008) studied rural Tanzania and supported this finding. This qualitative study involving FGDs with health care providers and community members showed that the decision to access healthcare was socially constructed. It was established that husbands and other family members (including mothers-in-law or other male and female relatives) made the decision if pregnancy-related conditions which was identified during ANC clinic visits warrant referral to healthcare services, while pregnant women themselves assumed a passive role on decisions made about their own health.

In Kenya, the Demographic and Health Survey (KDHS, 2014) showed that factors such as level of education, employment, and place of residence influence decision to access healthcare. For instance, women from the predominantly rural North Eastern region (including Marsabit) were found to be much less likely to make their own decisions about resources than their counterparts residing in major cities. This therefore suggests that women's power to access maternal health is diminished.

It is evident from the above studies that men's views about ANC clinics and participation are strongly influenced by culture and their knowledge of the purpose of ANC. This in turn affected women's health-seeking behaviours and healthcare access, as men are the key decision makers and control family resources. Nonetheless, there is a gap in literature on our understanding of men's views on factors influencing ANC clinics, particularly among the pastoralist communities. This is the gap explored in more depth in this current study. Also, studies conducted in Kenya mainly focused on sexual and reproductive health, including the use of contraceptives, family planning decision making and the prevention of mother-to-child transmission of HIV (Aluisio et al., 2011, Onyango. et al., 2010).

2.4.2. Roles and views of Traditional Birth Attendants on ANC use

In resource-limited settings such as sub-Saharan Africa, TBAs' roles are reported as critical, particularly in rural communities, coupled with their availability, accessibility, and culturally acceptable roles (Kaingu et al., 2011, Vyagusa et al., 2013, Wilunda et al., 2017). TBAs are community-based, non-formally trained providers of care during pregnancy, childbirth, and postnatal care (Sang, 2017). Characteristically, older TBAs are associated with being more experienced, and thus command great respect in their communities, exerting more influence over women's health-seeking behaviours. This was revealed in a qualitative study in Tanzania that revealed that despite TBAs' lack of knowledge on danger signs of pregnancy, and on possible risk of HIV infections, and use of unsafe delivery materials, women and community still consult them (Vyagusa et al., 2013). It was established that main reason why women do not attend or delay obtaining healthcare services is the trust women and community have in TBAs services, including husbands, who expect their wives to first consult TBAs to be assured of their pregnancy status, and to be provided with traditional medicines, before attending ANC clinic (Vyagusa et al., 2013). Formal healthcare services were perceived as necessary only in the case of pregnancy-related complications, before or after childbirth, thus women continue consulting TBAs after the initial registration at ANC clinic.

Turinawe et al. (2016) conducted a large one-year ethnographic community-based study in rural Uganda. It was found that TBAs' roles influence women use of ANC services and men's roles and involvement during pregnancy. TBAs' influential roles also affected men's roles, including provision of financial support, behavioural change, and attitudes towards use of ANC services, which in turn contribute to women's ANC access. It was established that TBAs command a strong respect and trust in the community, and they use their position to advocate for women to access family resources through negotiating with men to provide resources for women to attend ANC clinics. Moreover, the knowledge gained from formal training, coupled with traditional knowledge, made it possible for TBAs to engage with men and share information on antenatal care, HIV, family planning and childcare, and birth preparation, and

empowered them to assume important roles in supporting referral to healthcare. This was found necessary because of cultural practices that contributed to the limited interaction of men and women, and influenced women's health, as men tended to engage in risky behaviours. This study demonstrated TBAs' critical roles in the community, particularly rural settings, in influencing women's maternal healthcare practices, including ANC utilisation, through engaging with men.

Above studies demonstrate TBAs views on barriers and enablers of women healthcare services use in rural communities. It is clear TBAs roles facilitated women engagement with healthcare services, however, our understanding of their views among pastoralist communities is limited. The assumption is that given the community way of lifestyle as earlier discussed, TBAs may have good understanding of women healthcare experience and play key roles in pregnancy care, but limited literature exists concerning this, hence the current study sought to explore the same. In addition, existing literature from Kenya on TBAs focuses mainly on their traditional herbal practices, referral for skilled birth attendance and changing roles of TBAs, with less focus on their perceptions of factors influencing attendance at ANC (Cheptum et al., 2016, Kaingu et al., 2011, Kitui et al., 2017).

2.5. Healthcare system and economic barriers to ANC access

This section discusses the impact of factors within the healthcare system, particularly the relationship of health care providers and women, and resources in the African context. The literature review identified factors such as nurse-women relationships, fear associated with HIV testing, resources, cost of services and the quality of care as influencing women's healthcare access. In addition, geographical barriers (distance, poor roads, and insecurity) affect ANC use. The literature review showed that these factors commonly influence ANC access, and most previous studies presented them as combined causes. Therefore, in this section, these factors are discussed

under two thematic sub-headings: punitive approaches on ANC use, and challenges of local infrastructure and quality of services.

2.5.1. Punitive approaches on women's use of ANC services

Punitive approaches rebuff women's attempts to access health facilities, with health care providers denying women ANC services. According to the literature, women may be denied the opportunity to start ANC clinic in early pregnancy, and are threatened with the denial of services if childbirth was not spaced, and if they attended ANC without being accompanied by their partners (Abrahams et al., 2001, Callaghan-Koru et al. (2016b), Pafs et al., 2015). Such punitive approaches coupled with economic barriers contributed to women only making a single visit to a clinic, mostly in the last trimester of pregnancy to obtain clinic cards which are needed in case of obstetric emergencies (Munguambe et al., 2016, Pell et al., 2013). These experiences have been emphasised by numerous authors, as explored below.

In Western Kenya, eight FGDs were held with women to explore the reasons why they do not attend ANC clinics regularly (Mason et al., 2015). The study found that women overwhelmingly recognised attendance at ANC as having benefits including testing for HIV, receiving medications, and incentives (e.g. mosquito nets) and clinic cards. It was further revealed that despite economic challenges (e.g. cost of interventions and transportation cost) being critical barriers, they did not prevent women from using ANC services. Instead, negative experiences during previous pregnancy and fear of maltreatment by the health care providers were the main causes of women delaying their visit until the last trimester. Attendance was further discouraged by long waiting times, coupled with less consultation time for the women (e.g. nurses wasting time chatting among themselves). Similarly, in South Africa, malpractice including verbal and physical abuse led to delayed and poor attendance at ANC (Abrahams et al., 2001, (Pretorius and Greeff, 2004)).

However, in some African countries (including Ghana, Malawi, and Uganda), nurses justified their malpractices, such as physically pushing women and shouting at them for not following the rules at the ANC clinic, ignoring women's views, and not providing pregnancy-related information (Ayiasi et al., 2013). This was blamed on the deficiency in health systems, such as a lack of staff, work-related stress, and heavy workload.

Moreover, a constructivist focused ethnography study in rural Ghana found that such punitive approaches thwart women's attempts to seek maternal healthcare services (Yakong et al., 2010). This included mistreatment and intimidation, particularly by male nurses, lack of privacy when care was provided, and not being involved in their care planning and decision making. Women were further cautioned for attending clinic early, for not practicing family planning, and for asking questions, and they were threatened with denial of treatment if they failed to follow nurse's instructions, such as standing when talking with nurses. The need to promote a positive relationship between the nurses and women, the structural organisation of the clinic layout, and allowing and considering women's views for services provision were recommended for better healthcare experiences. A qualitative study from Malawi in urban setting revealed similar findings where such punitive treatment led to women resorting to family members, relatives, and peers for pregnancy-related advice (e.g. on nutrition) (Roberts et al., 2015).

In the Rwandan capital city, Kigali, such punitive approaches by the HCPs made some women take extreme measures of hiring unrelated men to pose as their partners in order to be provided ANC services (Pafs et al., 2015). A year-long ethnographic study involving in-depth interviews, FGDs, and observations of women, men, and other key informants revealed that men and women were well-aware of the recommendation to attend four focused ANC visits, and were willing to attend ANC and to be tested for HIV (Pafs et al., 2015). Despite such willingness, several barriers, which Pafs et al., (2015) referred to as '*paradoxical*' (p.1154), posed significant barriers for women to use ANC services. These barriers included the mandatory presence of partners at least during the first visits for women to access ANC services, any

woman without a partner or referral letter from the authorities being denied HIV/AIDs testing. In addition, supportive partners are invited only during the initial visit for HIV/AIDs testing, while subsequent ANC visits with partners were denied. Such practices led to dissatisfaction and delay in using ANC services among women without a committed partner or those not married, leading to women not completing the four required ANC visits. This finding clearly demonstrates that unmarried pregnant women experience particular exclusion and institutional barriers, as they have to meet numerous stringent bureaucratic expectations before being allowed to access fundamental ANC services, which leads to delayed ANC access.

While Pafs et al., (2015) and Robert's et al., (2015) studies captured the views of several stakeholders in urban populations, it may be worthwhile to include views of women from rural settings using dispensaries, as recommended by Callaghan-Koru et al. (2016b) in their observational study in Tanzania, which revealed similar findings. In addition, the study found that ANC visits were not allowed in the first trimester, women were expected to have spaced pregnancies, and HIV testing was made mandatory. All these barriers imply that women desire for early engagement with ANC clinic, to achieve the required number of visits, and to meet their pregnancy care needs is diminished. In this regard a qualitative study in Kenya which found similar barriers recommended the need for training and education of nurses and midwives to focus on how their attitudes and behaviours influence women's health-seeking behaviours (Byford-Richardson et al., 2013).

These findings elicit an argument that is relevant to ANC utilisation in the African context, as women endeavour to seek healthcare services during pregnancy, yet experience negative attitudes from health care providers themselves. As mentioned previously, health care providers attempt to justify poor quality of care and even malpractice on the ground that they face a challenging work environment, where resources (e.g. shortage of staff, equipment) are limited to provide quality services. This, in turn, leads to nurses experiencing burnout due to heavy workload, frustration, and a lack of motivation, as shown in Kenya (Cheptum. et al., 2014, Lang'at and Mwanri,

2015, Wamalwa, 2015), and Malawi (Roberts et al., 2015). These findings affirm the above studies demonstrating how negative attitudes towards women influence their health-seeking behaviours (Cheptum. et al., 2014, Ayiasi et al., 2013). These resource limitations are discussed next.

2.5.2. Challenges with local infrastructure and quality of care

Local infrastructure, including both geographical barriers and lack of resources in healthcare facilities have been highlighted throughout this literature review, as having direct and strong influences on the provision of quality services. This is particularly common in public health facilities across the sub-Saharan Africa, affecting the provision of maternal healthcare services during pregnancy, childbirth, and postpartum (Mahiti et al., 2015, Pell et al., 2013, Pretorious and Greef, 2004, Wilunda et al., 2017). In Kenya, the introduction of the Free Maternity Services (FMS) policy in 2013 was intended to enhance access to maternal healthcare services during pregnancy and delivery to improve maternal health outcomes (Ministry of Health Kenya., 2015). However, delayed financing of health facilities led to frequent resources limitations, and hence poorly equipped health facilities, which in turn contributed to inadequate provision of quality services (Pyone et al., 2016, Tama et al., 2017). These studies suggested that the motivation of staff, improving policy on financing health facilities, adequate supplies, and training services for health care providers might address challenges of implementation of FMS in Kenya to improve utilisation of services during pregnancy and childbirth (Tama et al., 2017). A qualitative study in Ghana reported similar findings (Ganle et al., 2014). Studies from Kenya and Tanzania (Cheptum. et al., 2014, Lang'at and Mwanri, 2015, Mrisho et al., 2009, Mugo et al., 2015) further added that nurses recognise challenges as largely attributable to health system failures, such as lack of resources, poor working conditions, poor remuneration, lack of opportunities for career progression and training opportunities, and low recognition as affecting the provision of maternal healthcare services.

Pell et al. (2013) indicated even though several qualitative studies on barriers to ANC attendance have been conducted in sub-Saharan Africa, few examined why women delay attendance at ANC. Their study was based on a large qualitative study with a large sample of 645 participants in urban and peri-urban agricultural settings across three countries (Kenya, Malawi, and Ghana). The study involved several participant groups, including pregnant women, health care providers, community members, and opinion leaders, to explore their views on factors influencing attendances at ANC. The results of this study showed both similarities and differences across regions and groups regarding factors influencing attendance at ANC. It was common across the three sites that attendance was limited mostly due to resource limitations (equipment and cost of services), fear of being mistreated by health care providers, and low knowledge of pregnancy care. In Kenya, women's accounts of the purpose of ANC were limited, tending to focus on procedures such as being provided tablets or injections and abdominal palpations, suggesting quality of information shared.

Interestingly, observational data showed that women's socio-economic status further influenced relationships and interaction style during ANC consultation. Women of higher socio-economic status (i.e. wealthier, more educated, and having closer relationships with health care providers) had more two-way interactions and sharing of health information. This was in contrast to women who are of low-socio-economic status, and that diminishes their ANC experiences (Pell et al., 2013). This finding was supported by FGDs of a study conducted in Tanzania that found good quality services are offered for those who can afford them, or who offer bribes to health care providers (Mahiti et al., 2015). This implies that poor women have difficult accessing healthcare services because of their socio-economic position, and this may lead to poor health-seeking behaviours and utilisation of ANC services.

In addition, another study from Tanzania found that although women were positive about ANC use, the economic burden for making numerous visits to ANC clinics was great (Mrisho et al. (2009). It was established that despite the availability of ANC services, underutilisation of ANC was attributed to

individual women's economic factors, an expectation of making contributions to support the provision of services in the community, and a lack of understanding of the purpose of interventions (e.g. medications). Although these barriers are themselves critical to accessing services, women desiring to access the services early are further limited by health care providers practices of turning them away when ANC is initiated in the first trimester, due to a lack of resources to diagnose the pregnancy (Callaghan-Koru et al. (2016b), Mrisho et al., 2009).

These studies suggest that women's socio-economic status, nurses' punitive approaches, and a general lack of services provision due to resources limitations at the health facilities negatively influences women's access to and utilisation of ANC services.

2.6. Chapter summary and literature gap

This chapter has highlighted pertinent issues that influence attendance at ANC in Africa. These include the impact of socio-cultural beliefs and practices on ANC use, decision-making ability, relationship of women, men and TBAs, and health system constraints. These factors impacted on women's decision-making powers to access ANC and could be more profound with regard to pastoralist women who live in remote areas, with challenging geographical settings. However, limited studies on pastoralist women's ANC access made it impossible to understand whether the factors identified in the literature review could also influence pastoralist women's ANC use in similar way, providing a basis for the rationale for this current study.

For example, although negative attitudes among health care providers have been reported to pose significant barriers to women's ANC use, the limited available research does not demonstrate how the nurses' and women's relationship might influence ANC provision for pastoralist women in Kenya. Thus, the current study sought to address this gap through observations at the dispensaries on nurse-women interaction during ANC consultations. In fact, Callaghan-Koru et al. (2016a) recommended the need for research among

women using dispensaries in rural settings on barriers to four focused ANC attendance and communication issues. Methodological limitation of the included studies mainly related to inadequate reporting of recruitment strategies, and data analysis process.

Although studies on barriers and facilitators to maternal healthcare services have been done in Kenya, no specific study has been documented on the pastoralist community, and how pastoralist women engaged with healthcare services during pregnancy, in particular ANC use. It is also unclear whether a lack of engagement with healthcare services may have contributed to higher maternal mortality in Marsabit County (see section 1.2.1). Moreover, evidence from this County suggest high teenage pregnancy rate (UNFPA, 2014, (KDHS, 2014, UNFPA, 2014), suggesting increased risk of negative pregnancy outcome. As such, the current study focuses on pastoralist women in the County to better understand their ANC experiences.

The only study in Kenya among a pastoralist community focused on the barriers during hospital delivery (Caulfield et al., 2016). This study suggested that attendance at ANC might be critical in mitigating cultural practices that hinders pastoralist women's use of maternal healthcare services and improving knowledge to enhance decision-making on choices of place of childbirth. However, there remains a gap in our knowledge on pastoralist women ANC experiences, which the current study aims to address. Some authors have also argued that there is 'severe' data limitation on research among ethnic minority and pastoralist women's health seeking behaviours (El Shiekh and van der Kwaak, 2015, Ogundairo and Jegede, 2016) both during pregnancy and post-partum. El Shiekh and van der Kwaak, 2015 suggested a need for a study on nomadic women's health-seeking behaviour during pregnancy.

Whilst it is positive to explore pregnant women experiences of ANC practices from their own perspectives, it is also important to consider views of other key stakeholders that literature review has suggested shape ANC access (Munguambe et al., 2016, Ogundairo and Jegede, 2016, Simkhada et al.,

2010, Wilunda et al., 2017). It could be possible that these key stakeholders also face challenges in supporting women during pregnancy. Therefore, it is important to understand how their roles shape pastoralist women ANC access, in order to obtain holistic picture of what influence pastoralist women use of ANC services.

The literature suggests that to design appropriate measures to address socio-cultural and health promotion services for women, there is a need to first understand and explore their perceptions about their specific needs. Therefore, exploring pastoralist community experiences may provide some evidence for provision of ANC services, given the community context, as discussed previously. Based on above research gaps, the research aim and objectives were developed, as stated below.

2.7. Research aim and objectives

2.7.1. Research aim

To explore the experiences of ANC amongst the pastoralist community in Marsabit County in Kenya in order to understand key barriers and facilitators of ANC service uptake.

2.7.2. Research objectives

1. To explore women's knowledge, experiences, and perspectives on ANC services, and factors influencing ANC services use.

2. To understand men's perspectives regarding factors influencing ANC and potential facilitators for ANC use.

3. To explore traditional birth attendants' (TBAs) views about ANC, barriers to and potential facilitators for ANC use.

4. To explore nurses' perceptions about the factors that influence the use of ANC services and to observe their practices at the clinic related to these.

5. To identify possible ways to enhance the use of ANC services amongst pastoralist community

CHAPTER 3
METHODOLOGY, STUDY DESIGN AND METHODS

3.1. Introduction

This chapter presents the underpinning philosophical paradigm, and the study methodology, design, and methods. The chapter is structured as follows. First, it explains the philosophical grounding of this inquiry, Critical Realism, and how it supports the study's aim and design (Focused Ethnography). This explains the methodological approach. Subsequently, the study design and methods of data collection are presented, followed by the process of accessing the study field, the participant selection process, and the process of data collection. Next, data management and analysis procedures are explained, followed by consideration of ethical observances. Finally, methods to enhance methodological rigour are posited, which are critical aspects of ensuring the quality of the study and reflexivity on the research process.

3.2. Philosophical underpinnings of the research: critical realism (CR)

As cited in Fletcher (2017), critical realism (CR) was developed by several theorists, including Bhaskar (1979), Archer (1995), Sayer (1992), Collier (1994), and Lawson (1997). My research is guided by the philosophical assumption of CR as developed by Roy Bhaskar (1979) as a solution to the 'paradigm war' between positivism and constructivism (Denzin and Lincoln, 2011). By this I meant that by taking components of both approaches (positivist and constructivist), CR provides detailed accounts of the studied subject, in this case ANC use, by exploring ontology (assumptions about the nature of reality) and epistemology (the ways in which this reality can be understood) in order to explore factors influencing ANC attendance.

The classical scientific approach of positivism aims at discovering absolute knowledge of an existent external reality. Positivism posits that phenomena have an independent existence, and experimental testing of relationships between existent phenomena to verify or disprove *a priori* hypotheses can produce generalisable conclusions (Taylor, 2018). Empirical positivism is the basis of natural sciences, mainly based on quantitative epistemology, but it is of less benefit in studying more complex phenomena involved in interpersonal human relations and systems, where qualitative epistemology is often more relevant. Pragmatists are more concerned with how experiences help in achieving the purpose of the study and solving practical problems in social settings. Pragmatists often involve both quantitative and qualitative elements, as in mixed methods research (Biesta, 2010), as knowledge is believed to be grounded in social settings and would only be obtained through experience (Walsh and Kaushik, 2019).

Constructivism affirms a subjective ontology, based on meaningful realities being socially produced by the interactions of participants in their settings, and their resultant perceptions, hence knowledge of phenomena is constructed rather than discovered (Levers, 2013). Constructivists seek to understand reality from interpretation of thick description of participants' views, believing that all accounts are valid, and do not enquire whether the observed events have unobservable structure and power (Edgley et al., 2014). As such, because of its subjectivity, the fundamental basis of the constructivist knowledge becomes questionable in terms of validity and generalisability, particularly for decision making purposes (Scotland, 2012).

Critical realist explores beyond the observed for broader understanding about why the event occurred (Parr, 2013). This is achieved through listening, observing, and participating in peoples' natural settings in order to gain deeper understandings, and to suggest possible practical solutions to address the social problems identified (Fletcher, 2017). Unlike in positivism, both participants and researchers interact to discover the accounts of experiences, and the researcher critically analyses the knowledge while acknowledging the context and its cultural, political, and historical dimensions (Scotland, 2012,

Brown et al., 2002). Walsh and Evans (2014) further added that CR ontology sees realities as layered, which relate to relationship between surface appearance and the deeper level of reality, which allows researcher to explain the data with more depth, rather than shallower descriptive methods. According to Walsh and Evans (2014), the three-level of ontology of CR includes the 'empirical', the 'actual', and the 'real'. The researcher explores the three layers of complex nature of social issues to identify the causal mechanism of what is being experienced by participants and observed by researcher. The three layers are distinctive in explaining the social reality:

- *Empirical* emphasises observable events (i.e. the experience of events, as perceived or observed by the participants and the researcher). In the current study, this pertains to what participants perceived as barriers to or facilitators of ANC use, and what was observed during ANC consultations and field visits.
- *Actual* is about what would happen if the events (experiences, perceptions) occur, e.g. attendance or non-attendance of ANC, knowledge gain, obtain perceived benefits.
- *Real* is the deep causal mechanism that exist to produce the event that occurred at the empirical level (Sayer, 2000), answering 'why' questions about events, for example the underlying cause of the use or non-use of ANC.

The current study's interest is to explore and understand which structure or power and the causal mechanism that explain why women use or do not use ANC. The 'real' has causal powers that causes change in the events (Fletcher, 2017). Therefore, the CR approach explores to explain the social problems (e.g. factors influencing ANC) in reference to the three layers of reality while acknowledging the significance of meaning, power and social structures (Easton, 2010 , Walsh and Evans, 2014).

The participants' experiences are shaped by various factors that include social settings inhabited by researcher, health system factors, social environments, and past experiences (Freeman and Mathison, 2009). Furthermore, the literature review has demonstrated that the above factors influence women's

use of ANC services (although previous studies did not include pastoralist women). Although every participant may experience ANC use in their individual ways, there is the possibility that they also have shared understanding as members of the social group to which the individual belongs, such as the family, community, or service providers, thus drawing on shared meanings of their experiences. In addition, CR believes that solutions to identified social problems exist, and that research should incorporate an action plan to reform lives of participants, institutions, and researchers (Sayer, 2000).

Based on the explanations of Walsh and Evans (2014), it can be argued that to research this largely under-researched population in relation to knowledge of ANC, an approach that would allow for deeper understanding of their health practices is necessary. As CR focuses on asking 'how' and 'why' questions in order to provide potential recommendations (Fletcher, 2017), CR was adopted to explore the questions about the nature of reality (ontology) and knowledge (epistemology). This is to understand specific factors influencing ANC use, and for possible recommendation to enhance ANC use, given that the study area (Marsabit) has multiple maternal health issues, as discussed in section 1.2.1. The next section explains why qualitative research using Focused Ethnography (FE) approach was employed, instead of quantitative methods.

3.3. Qualitative research approach

The main focus of a qualitative research approach is to generate data about the nature of the social world, in order to explore the meaning that participants' make of the researched phenomena in the society (Ritchie and Lewis, 2003). It is a flexible approach that provides holistic perspectives within the context of the study by interacting closely with the participants. The approach seeks to ask questions about *what*, *how*, and *why* people exhibit certain behaviours (Sutton and Austin, 2015). The approach thus aims at exploring people's values and beliefs that might be used to inform ANC services delivery (Downe et al., 2019). This provides detailed description (Pope et al., 2002), and context-specific understandings of factors that facilitate or hinders ANC

service use, through direct observations of their experiences of ANC and one on one interactions.

This is unlike quantitative positivist approaches, which explain phenomena using predetermined instruments, with focus on outcomes to ensure validity (Yilmaz, 2013); such methods are unable to explore deeper meanings involved in social contexts (Merriam, 2009). Qualitative research views quantification as too limiting for understanding social realities and holistic contexts (Atieno, 2009). Attempts to quantify feelings, behaviours, and experiences in quantitative research, typically using structured questionnaires (e.g. with Likert-type answers) in quantitative research cannot probe deeper perspectives, such as how pastoralist women experience ANC. The choice of a qualitative approach was further informed by the fact that there is no previous study that has been conducted among pastoralist women, and qualitative studies are advisable for exploratory research. Qualitative research allows systematic data collection, organisation, and analysis of textual data, usually generated through in-depth individual interviews, FGDs, and observations, to identify what matters to the participants in their environment (Pope et al., 2002).

However, being closer to the participants, and exploring and observing their behaviour in their natural settings makes the researcher a key player in the research process (Atieno, 2009). Thus, the approach has been criticised for being subjective, raising questions about rigour. As such, there was a need for the researcher to be aware of this limitation, and to critically reflect on their positionality in the research process (Berger, 2015), and thus enhance the credibility of the findings (Bradbury-Jones, 2007, Guillemin and Gillam, 2004). In current research, reflexivity is particularly important, as FE increases close relationship of researcher and researched, hence maintaining quality and trustworthiness was critical. Section 3.9 explains steps taken in this study to enhance quality and trustworthiness.

The next section describes why an ethnographic approach was selected as the most appropriate choice for this research study, its application in healthcare studies, and the rationale for the choice of Focused Ethnography

(FE) for the current study, considering other research approaches that could theoretically have been utilised.

3.4. Methodology: Ethnography

Research methodology refers to the process the researcher follows to develop and produce a framework through which the research can be conducted, and it guides the choice of research methods (Haradhan, 2018). Ethnography has its origins in anthropology and sociology (Wall, 2015). It is a methodology that seeks to explore people's cultures through direct experience and participant observation (Lambert et al., 2011). In addition, several authors have described ethnography from different perspectives as a process and product (Agar, 1996), a methodology (Savage, 2000), a practice (O'Reilly, 2012), and a complete philosophical paradigm (Atkinson and Hammersley, 1998). Others described ethnography as researchers immersing themselves in peoples' lifestyles to learn the truth about their social behaviours in their local context, through obtaining their stories in their own words, learning about people by learning from people (Roper and Shapira, 2000).

The distinctiveness of ethnography is about contextualising people's activities and behaviours in their own natural setting, allowing the researcher to observe and ask how and why people behave the way they do, rather than only depending on spoken words of experiences, as in phenomenology (Al-Zahrani, 2010). This allows researcher to explore and capture peoples' daily routines, tacit patterns of social practices and holistic views, through one-on-one engagement with participants, and participating in their daily activities where possible.

Ethnography approach takes several forms, including classical anthropological ethnography, involving long periods of field work living among specified groups of people (for example a village or tribe) (Mayan, 2009, Muecke, 1994). In traditional ethnography, the researcher's knowledge of the study setting is limited to theoretical, academic knowledge at the outset, and

the field is entered with unclear purposes, except for achieving a deeper experience in the lived reality of the studied subject (Morse and Richards, 2002). However, for FE, as described later, the approach is clearly defined with regard to a specific area, with some prior theoretical knowledge, spending less time in the field and exploring participants common behaviours and shared experiences within specific setting, with the assumption that the participants, including the researcher, share a common cultural perspective (Cruz and Higginbottom, 2013, Mayan, 2009, Morse and Richards, 2002). This, therefore, guided the current study with the aim to explore focused research question on ANC experiences of specific group of people (a pastoralist community).

Ethnography adopts multiple data collection methods, such as interviews, participant observation (PO), and documentary analysis to obtain detailed information (Fetterman, 2010). As Lambert et al. (2011) expressed, *'reality is a product of multiple perceptions, including those of the researcher, and is produced by interactions between researcher (etic) and participants (emic)'* (p. 21). This explains aim of ethnography approach and its distinctiveness, obtaining in-depth data through interactions with the participants in their natural settings, observing for emic and etic perspectives through multiple approaches, while maintaining reflexivity (Fetterman, 2010, Lambert et al., 2011, O'Reilly, 2012).

3.4.1. Ethnography in healthcare

As a methodology, different disciplines such as medicine, business, public health, and nursing have widely adopted ethnography (Hughes, 1992). In healthcare studies, the focus is to understand meaning and experience of patient illness (Morse, 2010) and to yield knowledge on health-related interventions (Boyle, 1994). The use of ethnography in nursing research has developed beyond understanding health and illness in the context of a culture (Wolf, 2007), to understand the social issues that affect nursing practice (Streubert-Speziale and Carpenter, 2007). In healthcare research,

ethnography has been used to evaluate users' views of quality of healthcare services, assessing the relationship between healthcare professionals and patients, medical teaching, and evaluating family health programmes (Caprara and Landim, 2008, Rashid et al., 2015).

Since the 1990s the need for ethnographic research has markedly increased, according to several studies (Cook, 2005, Morse, 2010, O'Byrne, 2012, Savage, 2000). This increase is attributed to a need to understand the meanings and experiences of illness, and cultural knowledge about health and illness, through techniques involving more observations (Rashid et al., 2015). An ethnographic approach is useful in accessing the beliefs and practices surrounding the health, illness, and service delivery for all stakeholders involved (Savage, 2000). The interaction between the participants and researchers, while emphasising the context, makes ethnography highly suitable for healthcare research.

This further suggests that an ethnographic approach helps to understand those circumstances in healthcare systems and *'getting to the root issues about the patient's care. This in turn would provide the decision makers more reliable and appropriate information in order to find real solution than trial and error approach'* (Goodson and Vassar, 2011 p.3), providing individuals with a chance to make choices regarding their healthcare practices. Ethnography studies have contributed to development of policies and practices in social settings (Devadas, 2016, Higginbottom et al., 2014). For example, Higginbottom et al. (2014) found that health care providers' awareness of different ethnic cultural group's food practices is critical for planning services provision, as people's choices of what to eat is influenced by their experiences, ability to access required food, family contexts, and socio-economic status.

Similarly, in the current study, exploring and understanding factors influencing pastoralist women ANC practices, and their experiences about use of ANC, might shed some light on the causes of high maternal mortality and morbidity rate (UNFPA, 2014), and reason for low use of healthcare services in Marsabit County (KDHS, 2014). Therefore, based on the above argument on the importance of ethnography in healthcare research, consideration of

ethnography as methodology of choice helped in understanding pastoralist women's use of healthcare during pregnancy in the current study. The rationale for the choice of FE in this study is presented in the following section.

3.4.2. Focused ethnography (FE)

Also referred to as micro (Wall, 2015) or mini (Leininger, 1985) ethnography, FE is a problem-focused and context specific approach to understand peoples' practices (Higginbottom et al., 2013 , Morse, 1987.). According to Wall (2015), researching a specific research question, unique population, specific sub-culture, and researchers' unique position requires an FE approach.

Similarly, Knoblauch (2005) argued that FE has emerged as a meaningful and useful approach to shape ways to improve care and care processes in primary care, community, or hospital healthcare practice, as the focus is on specific settings and peoples' distinct practices, issues, or shared experiences (Richards and Morse, 2007). As such, FE has been utilised by nurse researchers to understand societal issues that affect nursing practice (Higginbottom et al., 2013).

Focused ethnography focuses on what and how questions on 'shared beliefs, relationship, constrains and facilitators using strategies such as individual interviews, FGDs, PO and document analysis in order to better understand the culture being studied' (Higginbottom et al., 2013). Such strategies allow for total immersion into culture of the people to understand their social world, as they provide accounts of their stories in their own words, and in their local setting. Researchers choose these strategies to help in understanding meanings relating to culture and behaviours (Fetterman, 2010, Roper and Shapira, 2000, Cruz and Higginbottom, 2013), in this context ANC practices.

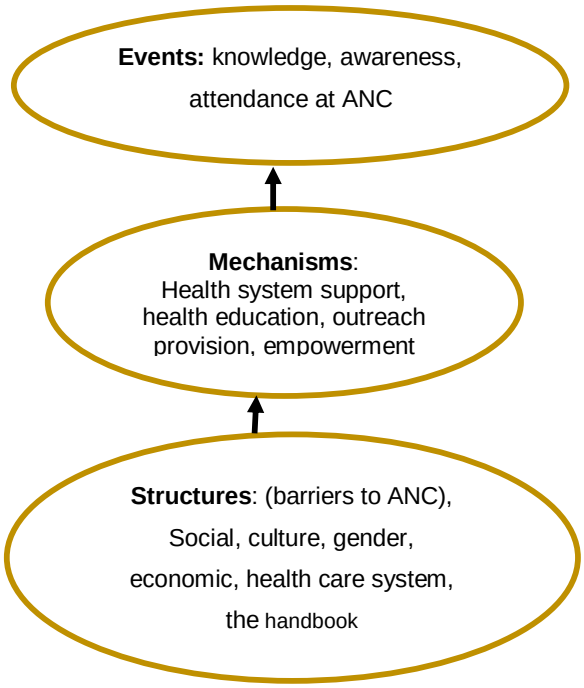
When researching a setting in which all different factors affecting women's use of the healthcare facility during pregnancy are explored at the same time, FE approach can identify helpful strategies to address women's needs. The current study considered the inclusion of different groups (pregnant women,

husbands, TBAs, and nurses). This was to determine their views on how personal, interpersonal, and societal factors influence women's ANC practices within their specific contexts (Cruz and Higginbottom, 2013), in this case, Saku sub-county in the larger County of Marsabit, in order to conceptualise peoples' behaviour and understand their situations more fully (Kilian et al., 2008).

Therefore, FE was found to be an appropriate approach for the current study's objectives because of its distinctive characteristics, which allows for exploring the culture of a specific sub-group of people (Roper and Shapira, 2000), in this case the Gabra pastoralist community. I wanted to understand their beliefs, perspectives, knowledge, and experience of ANC practices, and the barriers and facilitators of their attendance. This could inform necessary policies on how to address any barriers identified. Thus, given the short time frame for this study, FE was found to be appropriate, as its focus is specific (Leininger, 1985), requiring shorter field work duration and intensive data analysis (Knoblauch, 2005). CR approach also informs FE in describing events and identifying the structures and mechanisms providing explanation that focuses on how the agency would transform these structures (Sharpe, 2005).

Figure 7 illustrates how CR explains different aspects of ANC and is congruent with the FE approach. CR is a theoretical approach that can explore complex issues related to ANC use to produce deeper understanding of enablers and barriers to ANC use. Therefore, as Decoteau (2016) argued, CR makes an important contribution to ethnography research by providing causal explanation through relating structure to agency, exploring for their interaction to generate unexpected new findings from empirical data. Thus, FE explores the empirical domain through multiple methods of data collection to understand the actual layer and the real (mechanisms). There are other research designs that would have been adopted instead of FE, thus the next sub-section explains the rationale for the choice of FE over other designs.

Figure 7: Relationship of different aspects of ANC to the three layers of CR.



Source: adopted from Sayer (2000)

3.4.3. Alternative approaches to focused ethnography

The choice of appropriate design, methodology, and methods determines the success of the study to achieve specific research aims (Haradhan, 2018). Although the reason for the choice of FE is explained above, other qualitative methodological approaches such as grounded theory (GT), narrative research, and case study could have been applied in the current study. GT aims at generating a theory grounded in the data, from peoples' experiences, through an inductive analytical process (Mellion and Tovin, 2009), while the process of literature review is conducted after data have been collected. This is due to the belief that theories are grounded in data from the field (Glaser and Strauss, 1967). As a traditional approach, GT is positioned in the constructivist paradigm, and is focused on theory development, and particularly the approach to analysis. In addition, the GT approach fails to consider prior knowledge, instead generating theory from data to explore less-understood problems. However, for the current study the researcher

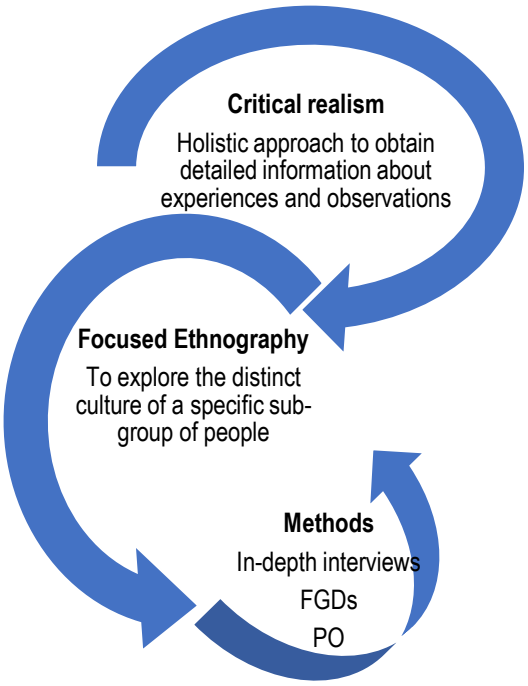
considered some prior theoretical knowledge to guide interviewing process, as the issues on maternal healthcare research has been well researched, although not in the context of pastoralist communities, which made FE an appropriate approach to focus on the specific sub-culture and distinct issues about pastoralist community-that is their ANC experience.

Narrative research (NR) involves studying one or two individuals and obtaining stories about meaning of their experiences (Clandinin and Huber, (in press)). A narrative research approach does not explore facts in more depth, but elicits participants' real-life narratives, providing subjective descriptions of their experiences (Wang and Geale, 2015). Narrative research would have been utilised if the intention of the current research were purposely to capture women's stories without in-depth understanding of their ANC experiences.

Case study research is also used when studying one or more cases within a bounded system, using multiple methods approach to obtain detailed description of the case or cases (Zaidah, 2007). Case study would have been appropriate for the current study, but it would have meant an interest in the way in which services were organised in particular settings, in order to compare and contrast.

The researcher's choice of FE goes beyond generating theory from data, subjective stories of participants' experiences, or comparing the cases. The current study aims to explore and understand distinct practices in more depth, especially issues concerning the behaviour of participants (Richards and Morse, 2007), with the main objective of shaping ways to improve provision of care (Higginbottom et al., 2013). Figure 8 demonstrates the relationship between the underpinning philosophical position that informed the research design and the methods used in the current research.

Figure 8: Relationship of philosophical paradigm, study design and the methods



3.5. **Study methods**

Research methods are the strategies or the techniques that the researcher uses to conduct the study, in order to gather data to answer research questions (Long, 2014). Qualitative research methods aim to obtain in-depth data about social phenomena (Caprara and Landim, 2008). Ethnography allows the adoption of multiple data collection strategies to understand the culture of participants, ensuring integrity and enabling data triangulation (Creswell et al., 2007, Crotty, 1998 , Dew, 2007, Fetterman, 2010, Reeves et al., 2008). Triangulation helps to compare participants' views, for example individual interviews and observations to obtain insights concerning phenomena being studied. These strategies allow use of open-ended questions that focus on and provide room for new and differing responses to emerge.

Therefore, using multiple sources of evidence in FE reflects attempt to secure deeper understanding of researched phenomena, in this case pertaining to factors influencing the use of ANC services by pastoralist women. Although these methods of data collection are also employed in other research designs, their distinctiveness in ethnographic research is to strengthen findings by the depth of engagement, observations and the continued process of interaction and presence in participants' natural setting during data collection (Janice and Smith, 2017).

Interviews and FGDs guides were developed in relation to research objectives, and theoretical knowledge of the topic under investigation. To develop the interview guide, I used a table to help me visualise how my interview questions related to my research questions. As tabulated in Appendix 4 and 5 the interview guide comprises two columns. The first column showing the specific key concepts covered by research questions, and the second column comprises the interview questions that relate to key concepts. The interviews followed the process of welcoming the participants, general overview of the topic, setting ground rules (e.g. for FGDs- giving each participant chance to answer questions and minimising interruptions). The questions progress from general experiences to specific. Participants' responses were probed for their experiences by asking them to share their experiences, discussing their agreement and comparing their responses. After preliminary analysis and consultation with the supervisory team, minor changes were made to the interview guide mainly related to probing questions. For example, further probing on traditional beliefs and practices related to staying well in pregnancy, women/TBAs relationship, their roles in supporting women in pregnancy as form of traditional ANC, how traditional practices during child birth influences ANC and how formal health system work with TBAs to enhance ANC access. The following section explains the data collection methods used in the current research.

3.5.1. In-depth individual interviews

The current study used semi-structured in-depth individual interviews, in participants' local language for Gabra women, and English for the nurses. This technique is commonly used in healthcare research (Jamshed, 2014), and consists of interviewing one individual participant per session. Individual interviews allow individuals to express sensitive issues or concerns, which the individual may not wish to discuss openly in front of other participants. The technique is also appropriate to explore unexplored areas in detail in exploratory research (Gill et al., 2008), as well as to obtain a large amount of information (Devadas, 2016). Unlike in quantitative research, with closed question surveys, individual interviews allows the researcher to explore participants' views in depth using an interview guide that accommodates the original insights of participants themselves (Kvale, 1996, Kvale, 2006, Gill et al., 2008), allowing participants to express their own thoughts and feelings (Berg, 2007). In this context, individual interview is considered an appropriate strategy to explore the experiences of pastoralist women, whose cultural constructions render them generally shy to express their feelings (Ogundairo and Jegede, 2016).

Therefore, this approach, consistent with the ethnography approach, was employed to engage 16 pastoralist women (postnatal and pregnant) to explore their views, providing contextual data on their experiences and perceptions of factors influencing ANC. This could touch on topics considered too sensitive to disclose in a shared group forum (e.g. FGD). Interviews were held with seven nurses because it was not practically possible to bring all the nurses together for FGDs. This was due to distance between the dispensaries, the nature of their work, and the fact that there was only one nurse per dispensary. Initially five nurses were targeted for the interviews; however, I identified two more nurses during the visits to the health facilities on different occasions. An interview guide based on the research objectives with a set of open-ended questions was used to facilitate in-depth discussions of the questions (Individual interview guide: Appendix 4).

3.5.2. Focus group discussions (FGDs)

The study also utilised FGDs for two different groups: men/husbands (n = 17), and TBAs (n = 18), separated into four groups each. The diverse nature of the participants for FGDs allowed for deeper and rich data through group interaction, whereby collective perspectives between members are generated (Gill et al., 2008, Rabiee, 2004). FGDs also helped supplement data derived from interviews (Schultze and Avital, 2011). Nyumba et al. (2018) highlighted that FGDs can be considered to collect data in order to evaluate and explore views on resource use, when the target group members are within one location, which minimises resource constraints related to geographical barriers to research methods. Indeed, in the current study the choice of FGDs for men and TBAs was pragmatic, as the researcher needed to obtain collective views from these key stakeholders. Previous studies have revealed that men and TBAs influence women's use of healthcare services (Munguambe et al., 2016, Turinawe et al., 2016), although no study among pastoralist communities. In addition, distances to and between the villages and financial constraints on this research project prevented travelling to each individual village for multiple visits to conduct individual interviews and bringing the participants together from across the villages was not practical. It was easier to gather the participants within each village than across the villages. Consequently, FGDs were deemed the most appropriate method to explore the perspectives of these participants.

Although Gill et al., (2008), and Krueger and Casey (2000), Gill et al. (2008) suggested between six to eight participants is often sufficient for an FGD, Gill et al. (2008) added that as few as three or as many as 14 could also be effectively considered. However, Rabiee (2004) expressed that since there is no guarantee that all recruited individuals might turn out for the group discussions, over-recruiting by 10-25% is considered, to allow for lower response rates and drop-out during the course of the investigation. However, evidence indicates that larger groups might be off-putting for shy participants, and are increasingly difficult to manage, with talkative or dominating individuals (Gill et al., 2008, Smithson, 2000).

Thus, for the current research, I attempted to recruit between six and eight participants for FGDs, and four to five individuals turned up for each session, which was sufficient to obtain their perspectives on ANC services. The composition of FGDs for the current group was homogenous in terms of gender, as culturally it was not desirable to include both men and women in one such group for discussions. Particularly as the men/husbands' group is by definition gender exclusive in the studied context, and all TBAs discovered by research inquiries were female. A focus group guide was devised based on previous literature and the researcher's knowledge; however, the guide was flexible, with open-ended questions encouraging participants to express their own perspectives frankly and fully as they understood the related phenomena (FGD guide: Appendix 5).

3.5.3. Participant observation (PO)

According to Roper and Shapira (2000), PO is a form of data collection whereby the researcher is ideally a part of the group being studied, in order to learn about their activities in their natural setting, and the experiences of their culture (Fetterman, 1998, Wolcott, 1999). Participant observation is an intuitive method of data collection in ethnography, as the researcher observes and engages in participants' daily activities in their own settings, to explore tacit knowledge. Such engagement helps researchers understand their socio-cultural context, both as insiders and outsiders, and their unanticipated behaviours (Zhao and Ji, 2014). Such data helps to understand the context of what was elicited in the interviews (Roper and Shapira, 2000).

By engaging in daily activities of service provision, such as calling women into the room, directing them to the sitting areas and weighing women (as instructed by the nurse), I observed some of the unspoken behaviours of the nurses during ANC consultations. This provided first-hand information and a deeper understanding of tacit patterns in their practices, which I subsequently squared with interview findings (Cruz and Higginbottom, 2013, Hammersley and Atkinson, 2007). This was intended to explore whether what the nurses

said during interviews was congruent with what was practiced at the clinics. Besides being a distinctive approach for FE data collection, observer as participant approach also takes less time than anthropological ethnography (Higginbottom et al., 2013). Therefore, given the limited time for data collection and the resource constraints, the observer as participant was considered appropriate to explore the relationship between the women and the nurses during ANC consultations.

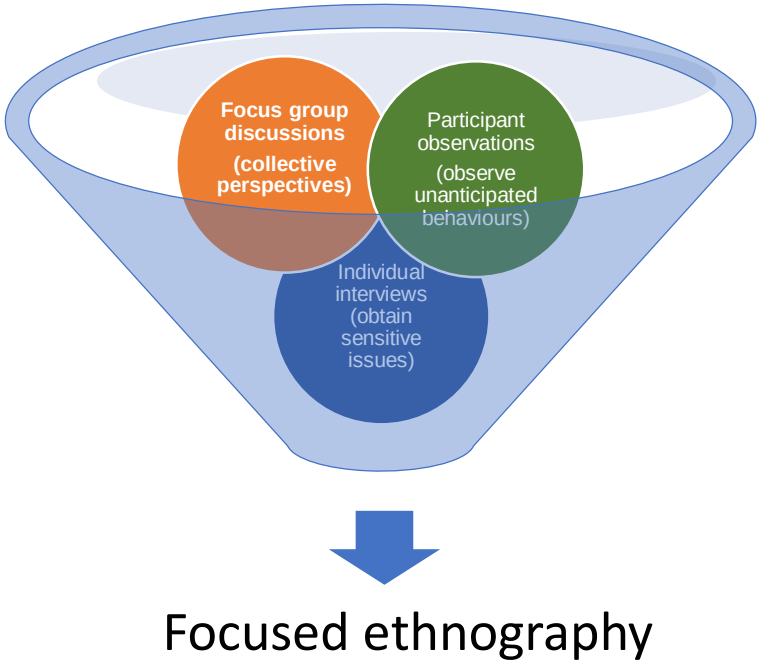
Observations were not conducted in the village settings, due to the anticipated challenges. For example, the participants might feel they were being observed, which would influence their behaviours and interactions during the interviewing process (Lacono et al., 2009). As earlier mentioned, pastoralist communities are also considered a vulnerable group, particularly for women (Eneyew and Mengistu, 2013), thus observing them might create unease and altering authentic interactions during interviewing. However, triangulation of the data using other methods (FGDs, interviews, and observations at the clinics) sought to enhance the quality of the findings.

There are no general rules on the time period to be spent in the field for observations, and this depends on the requirements of particular studies (Roper and Shapira, 2000). Allowing for casual and friendly interactions with the nurses, I spent time at the ANC clinics when services were provided to observe their daily activities, paying special attention to nurses' interactions with the women and any activities on health promotion during ANC clinic. Appendix 6 shows the observation guide. Observations of the nurses' activities during ANC consultation was guided by the following concepts:

- Physical environment setting
- Nurses' demeanour
- Nurses' verbal interactions with pregnant women
- Nurses' physical interactions with pregnant women
- Activities nurses perform when attending to the pregnant women
- Pregnant women's responses to the healthcare encounter

Therefore, consistent with the FE and CR approach, Figure 9 illustrates triangulation of the three data collection strategies (individual interview, FGDs, and PO) employed to yield information on the mechanism and the structures that influence pastoralist women's experiences of ANC. The following section explains the process of accessing the field for data collection using these strategies.

Figure 9: Triangulation of multiple methods of data collection



3.6. Field access and participants' recruitment process

The field access process involved several stages, including consideration of sample size, research approval, and data collection process (e.g. initial familiarisation, recruitment of participants, and the interviewing process).

3.6.1. Target population and sample size

The choice of study participants for the current study was typically purposive. Purposive sampling in ethnography considers participants' relationship with the phenomenon being studied (Higginbottom, 2004, Roper and Shapira, 2000). Ritchie and Lewis (2003) argued that in qualitative research the focus is on depth of coverage of data collection rather than breadth in terms of sample size, even if it means focusing the study on certain parts of the population rather than achieving a more broadly defined sample.

Furthermore, there are no specific rules when determining an appropriate sample size in qualitative research, as it may be best determined by the research timeline, availability of resources, and objectives of the research (Patton, 1990). Boadu and Higginbottom (2014) used a sample size of 50 participants in the FE and employed individual interviews, FGDs, and PO to enhance data quality, which was found to be viable. Morse (1994) suggested a sample size of 30-50 participants for ethnography and GT interviews. Therefore, the current study recruited 58 participants with a diverse range of characteristics; this number was found feasible within the scope of the study. Efforts were made to have representation across all six villages (Table 16: number of participants recruited per village). Participants were eligible for inclusion in the current study if they met the inclusion criteria shown in Table 6.

Table 6: Inclusion criteria

Participants	Inclusion criteria
Women	• Age: 15 years and above • Gestation: any trimester • Residence: pastoralist (living in the villages) • For postnatal mother (had baby less than I year ago) • Capable and willing to provide informed consent to participate in the study.
Men (husbands)	• Married (may or may not relate to the women in the study) • Pastoralist • Age: no limit • Capable and willing to provide informed consent to participate in the study.
TBAs	• May have experience of supporting women during pregnancy • May or may not relate to the women in the study • Age: no limit • Capable and willing to provide informed consent to participate in the study.
Nurses	• Qualified registered nurse/midwife • Working in the dispensaries • Have experiences of providing ANC • Willing to provide informed consent to participate in the study.

3.6.2. Research approval process

Ethical approval to conduct this study was obtained from the Faculty of Medicine and School of Health Sciences, Research Ethics Committees, University of Nottingham, UK, in November 2017; and from Kenyatta National Hospital, University of Nairobi Ethics Research Committees (KNH/UoN), Nairobi, Kenya, in January 2018. Subsequently, an approval letter to access the study area was received from Marsabit County Ministry of Health in February 2018 (Approval letters: Appendix 1).

3.6.3. Process of data collection

According to Roper and Shapira (2000), there is no standard rule on the time required for the data collections in ethnography, it could take years, months, or weeks. However, the research questions, the study setting, and the availability of resources determine the time the researcher would spend in the field. Therefore, given the timeline for the data collection and analysis, and the resource limitations, the data collection took six months (January-June 2018). This was to allow for better understanding of the study context (Anney, 2014). As can be seen, there were several distinct phases for data collection, as explained below. Table 7 illustrates the activities undertaken to access the study field.

Table 7: Activities during data collection

Date	Activities (phases)	Purpose
10.10.2017-10.01.2018	**Research approval phase** Ethics approval application, Review, and clearance University of Nottingham (FMHS-Research Ethic approval 24.11.2017 KNH-UoN Research Ethic approval 11.01.2018 Marsabit County data collection letter 19.01.2018	Permission to conduct the study
25-28.01.2018	**Initial familiarization phase** Visit to ANC clinic in main hospital, one ANC clinic in peripheral, meet with the director of medical service, nurse manager, CHWs Training researcher assistant on. ▪ Ethical issues ▪ Taking notes during FGDs ▪ Translation of data from Gabra to English language	For familiarization with the study area. Obtain background data of the study settings To explain and become familiar with the data collection process and the importance of confidentiality and note taking during FGDs
29.01.2018-03.02.2018	**Recruitment phase** Accessing and recruiting participants**:** From the six villages (Tables 16)	To identify the potential participants for the research.
12.02.2018 to 20.06.2018	**Interviewing phase** IDI or FGDs and observation of nurse-women interaction. Translation, coding, and initial data analysis concurrently. First 4 interviews shared with supervisors for guidance. • 16 individual interviews with women (pregnant and postnatal)	To obtain the data for the research, to inform subsequent data collection.

	• 7 individual interviews for nurses (1-2 nurse per dispensary) • 4FGDs of 4-5 persons for men and TBAs • 14 observations at six health facilities.	

3.6.3.1. Initial familiarisation phase

The purpose of the familiarisation phase was to gain background information of the study settings, establish familiarity with the settings and develops a sense of understanding for the social world of the pastoralist community. As cited in Barley (2011), Schensl et al. (1999) documented features that ethnographers need to be familiar with during the familiarisation phase; 'mapping the setting', becoming familiar with the norms, beliefs, rules, rituals and 'language' of the field location; and 'learning how to locate and build relationships' (p.2). I held informal observations at the main hospital's ANC clinic for three days. I also visited one peripheral dispensary to familiarise myself with the study area, considering the factors documented by Schensl et al. (1999), including background information on the daily operations of the centre and flow of the clients. The dispensary was chosen because there was similarity in terms of geographical location.

As the visits were an informal engagement to allow familiarisation with the settings, no interviews were conducted or written consent obtained, hence these data did not inform part of actual data analysis. However, issues that were observed during the familiarisation phase were considered during the actual data collection. For example, observations on how nurses interact with women provided ideas on what to observe about their relationships with the service users, and whether this could influence the health-seeking behaviour of the latter.

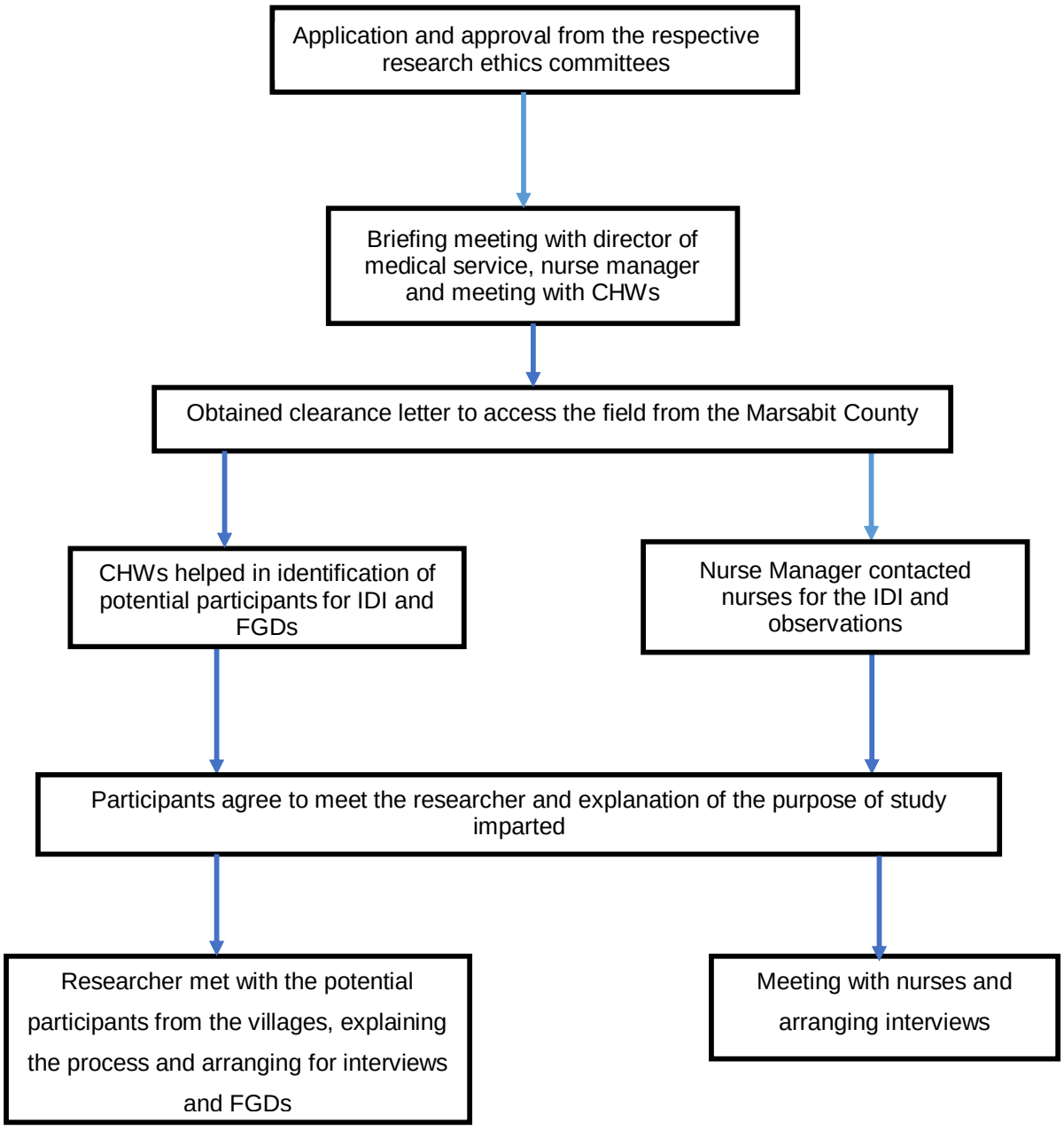
3.6.3.2. Recruitment process

The participants (women, men, and TBAs) were recruited from the six villages, while seven qualified nurses were approached from the four dispensaries and one health centre in the peripheral area that serves the villages. A description of these villages and dispensaries is presented in section 1.8.1.

Displaying posters was not practically possible in the village settings, as 61.9% of the women in Marsabit County cannot read (KDHS, 2014). Thus, the recruitment process involved networking with the community health workers (CHWs) who are familiar with the villages. The CHWs were trained in health promotion and sanitation by the County government, and there were a few deployed to the villages.

After the potential participants who met the inclusion criteria were identified, a detailed explanation was given of the purpose of the study in a language they understood (Gabra). This was done to provide them with an opportunity to discuss their concerns, and to allow them to ask questions about the study and make informed choices. The Kiswahili version of the participant information sheet were given in case there were any participants (men, women and older TBAs) who could read. Each nurse was also approached, and the English version of the participant information sheet was provided, and they were allowed time to give their informed consent if they wished to participate. Participant information sheets are shown in Appendix 2. Figure 10 illustrates the access and recruitment process.

Figure 10: Access and recruitment process



3.6.3.3. Interviewing process

The interviews typically lasted between 25-60 minutes. The interviews and FGDs were audio-recorded in order not to miss important information for those participants who had consented. I conducted all the interviews by myself, however for the FGDs a research assistant took notes as I moderated the discussions. In addition, any aside comments or observed emotional

expressions were recorded immediately. The advantage of using the tape recorder was that the researcher could listen to the live discussions on tape several times, unlike field note, which offered only static information. Audio-recorded data are more reliable (Halcomb and Davidson, 2006), allowing more opportunity to listen to participants' real voices (including their pauses, expression of emotions, intonations) during the entire data analysis process (Tessier, 2012). Therefore, listening to the tape several times aided in achieving data immersion, a deeper understanding of the mechanisms that influence ANC practices, and a stronger command of the emergent data pertinent to the research.

Almost all the contacted participants agreed to participate in the study. All the participants (men, women, and TBAs) were interviewed at the village setting, which was convenient and cheaper for the participants as there was no travel involved. One purpose for choosing the villages as the settings for interviews was influenced by the distance of the villages, so that the participants did not have to travel to attend. Secondly, the choice of FE as study design required social interactions in their social settings for in-depth understanding (Higginbottom et al., 2013). Interviews with the women took place in their huts, with minimal interruption, and it was convenient for them. One unmarried pregnant woman initially agreed to participate, but subsequently declined to participate on the interview day, and did not wish to give a reason for this.

The FGDs for men and TBAs were held in makeshift hut in the villages that were used by the villagers as a meeting point for their social gatherings. The shelter was an open area with a rooftop made of palm leaves, and there were minimal interruptions; except for a few birds' chirping at times, the quality of the recordings was not affected. Two men did not turn up during the FGDs; one indicated he was engaged at the time and would not make it, and the second one stated that he had changed his mind not to participate.

All the interviews for the nurses took place at the dispensaries during working hours, at times convenient for them. Since there was only one nurse per dispensary, the interviews were held when there were no patients at the facility, mostly in the afternoon. Additionally, PO took place in all the five health

facilities, where the nurses' interactions with women during ANC consultations were observed. Written consent forms were obtained for the observations from the nurses, and oral consent from the women. The observations were checked by asking nurses and women questions through informal conversations after the consultation (Roper and Shapira, 2000). Data was recorded as field notes and updated the same day including the context, any unique events, as well as the researcher's reflections. The observations were conducted during the six months of data collection, alternating with the other methods (IDI and FGDs). The observations lasted between 1-5 hours for each of the 14 observations.

When conducting observations, I took every available opportunity to observe the interactions between the women and the nurses, as well as viewing their working space. The number of observations conducted was sufficient to obtain the necessary data, since I noticed similar patterns of practices across the dispensaries in terms of nurses' activities; I stopped observations when I felt no new data was emerging (the point of data saturation). As Millen (2000) argued, the time spent observing does not necessarily guarantee usefulness of all the data collected, and I felt other data collection strategies like interviews and FGDs also yielded ample and rich data. Therefore, having decided that sufficient data had been obtained, I exited the study field and continued with the data analysis, as described in the next section.

3.7. **Data analysis**

Qualitative research data analysis involves interpreting participants' perspectives from the data. The researcher needs to provide true accounts of study findings concerning what was heard, seen, and observed, in order to understand and report for readers to learn from the findings. The interpretation and reporting of the findings is guarded by CR philosophical standpoint (Sutton and Austin, 2015), which is also consistent with FE, to explore multiple viewpoints, similarities, differences, and outstanding views from the participants accounts (Creswell and Miller, 2000). The retroductive process,

as explained below (section 3.7.2.4), helped identify the structures and mechanisms that influenced ANC use. This analysis is considered an inductive approach, a researcher-driven analytical approach involving an active thought process through retroduction to provide a deeper explanation of emergent accounts of participants experiences (Fletcher, 2017).

Ethnography data collection, analysis, and writing results involved an iterative, cyclical, and self-reflective process. I constantly revisited the data to gain new understandings (Higginbottom, 2004, Pope et al., 2000), and to generate accounts that reflect participants (emic) views, the study context, and my own on-going reflective analysis (Fetterman, 2010, O'Reilly, 2012). In the current study, such characteristics allowed me to explore participants' experiences and perspectives on factors that influence healthcare access during pregnancy, and the retroductive process identify causal mechanisms to ANC experiences (Fletcher, 2017). Therefore, the following section explains the process of data translation, management, and thematic analysis phases that led to the identification of themes.

3.7.1. Data translation and management

All required ethical processes were followed to protect the participants and their data. Data were collected in a language different from the one in which research findings are presented. Thus, I was careful when translating the raw data, which is becoming increasingly common in social research (Regmi et al., 2010, van Nes et al., 2010). As the first step in the data analysis process, translation involves compiling the data into useable forms, from spoken into different languages, in this case from Gabra to English. Translation of the recorded interviews and FDGs started on the first day of data collection, and continued throughout the field work period, and after I returned to the UK.

The immediate translation of the data while still in the field gave me an opportunity to become familiar with and immersed in the data during the process. In addition, the first few translated transcripts were shared with my

supervisors for clarification of the technique, and to gain guidance on subsequent interviews. The preliminary analysis of a few translated interview transcripts during the initial data collection phase guided areas that needed further data collection (Miles et al., 2014). This was done to enable clarification of any unclear issues on the subsequent interviews and FGDs. In fact, as I continued in consultation about the data collection process and challenges of data collection with my supervision team, reviews were introduced such as how to probe, and additional areas that needed further interviews were identified and addressed.

Each recorded interview and FGD was translated from the Gabra to English by researcher and the research assistant, who are both conversant in the local dialect and English. The research assistant and I both produced separate translations of interviews, and we compared our transcripts to ensure accuracy (Richards and Morse, 2007), and minimise translation errors (Regmi et al., 2010). The quality of translation depended upon the translator's ability to maintain the meaning of the raw data, as meanings could be lost during translation (van Nes et al., 2010). Thus, during translation of the current research data, the translators made critical attempts to translate interviews and FGDs as spoken by the participants, in order to maintain the original semantic meanings.

I read the transcripts a few times while listening to the audio recordings in order to check that the translations made sense in the context of English language. However, in the process I found that a few Gabra words might lose cultural meanings if given literal English translation. For example, the Gabra words *'ako bassan'* which were used by some participants have no direct meaning in English, thus the alternative and closest meaning was used to mean 'preventing placenta praevia'. In addition, the strategy of using annotations, such as giving more detailed explanations of words in brackets, was adopted to maintain meanings. (Regmi et al., 2010) emphasised the importance of checking, maintaining, and finding words with close and equivalent cultural meanings of spoken words during translations, in order to avoid losing the semantic meaning of terms.

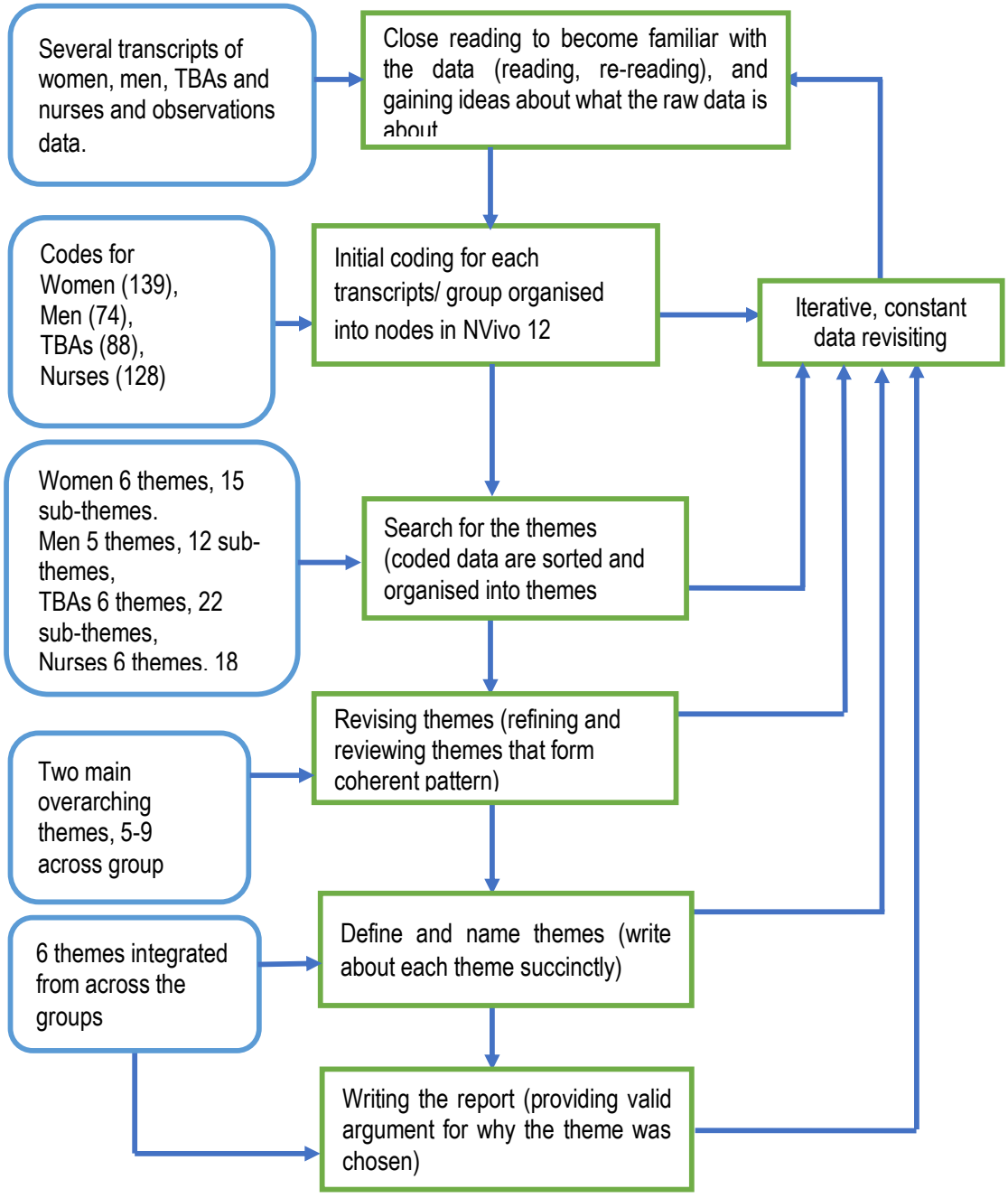
Most of the translation was completed in the field with the support of the research assistant. The research assistant was a registered male nurse with two years of experience in research projects involving FGDs and interviews, with involvement in the translation of research data. Training in note taking and ethical issues was provided during the familiarisation process. The research assistant's level of engagement with the research process could have significant impacts on the research process and study outcomes (Temple and Edwards, 2002). However, for the current study this effect was minimised, as I was involved in every stage of data collection and participants' preparation, and the role of research assistant was limited to taking notes during FGDs and supporting with translations. At the end of translations, we held a debriefing session about his thought process about the translations, asking his views about the translations (Deane and Stevano, 2015), to ensure the quality of the research outcomes.

The research assistant for the current study had limited personal knowledge of the participants, as he worked in a different sub-county. Although gender has been identified to have an impact on translation of data (Rani and Fauzi, 2017), in the current study this was minimised as the researcher assistant was trained and he had previous experience in academic translation. I also reviewed again the transcripts, listening to the audio recording of original interviews. To maintain the quality and the accuracy of the translation, the research assistant's translated transcripts were compared, to check for differences in translations. The outcomes showed great similarities in the meanings produced, and no significant concepts were missed out.

3.7.2. Thematic data analysis

The thematic data analysis process was helpful in reducing the large quantity of data into more flexible patterns, and to identify patterns from the data (Castleberry and Nolen, 2018). It followed five main phases: familiarisation of oneself with the data, generating primary codes; themes searching; reviewing the themes; explaining and naming themes, and writing the report (Braun and Clarke, 2013). Figure 11 summarises the thematic analysis process. The process is iterative and cyclical, to identify patterns in the data sets that are of importance in order to explain and make meaning of the data (Maguire and Delahunt, 2017). Although data analysis and report writing involved each data set and formed two chapters, the data was finally pulled together to identify connections, similarities, and differences across the group, with theoretical explanation guided by CR.

Figure 11: Coding and thematic analysis process



Source: Adapted from Braun and Clarke (2006)

3.7.2.1. Familiarisation and organisation phase

The first step in thematic analysis is to listen to the recorded interviews and FGDs and read field notes to get sense of the data gathered before analysis (Maguire and Delahunt 2017). I listened to the audiotapes to ensure content

was an accurate translation of all spoken words from Gabra into English language. Becoming immersed in the data allowed for familiarisation and an understanding of the meaning of terms or phrases in the context of the raw data, prior to the subsequent analysis (Castleberry and Nolen, 2018). As the familiarisation process continued, I continuously made some notes, and kept memos to gain ideas for coding. To organise the data in a manageable format, easy for retrieval and for conducting the analysis, I decided to arrange data in files as follows:

- Women interviews
- Men FGDs
- TBAs FGDs
- Nurse interviews
- Participant observations (POs)

All the files were uploaded into NVivo 12 to organise and assist with the coding and theming process. NVivo is used with a wide range of qualitative research designs to aid data analysis process (Zamawe, 2015). The data analysis and coding process was done separately for each group, starting with the women's interviews, then the nurses, followed by the men FGDs and TBAs' FGDs, and finally the PO. The iterative process of analysis for each data set took about one month.

3.7.2.2. Generating primary codes

This second phase of data analysis involves the initial process of producing codes, whereby I continuously revisited the data, reflecting on what was going on in it (Braun and Clarke, 2006). Castleberry and Nolen (2018 pg.808), define coding 'as process where raw data are gradually converted into usable data through identification of themes, concepts, or ideas that have some connection with each other'. The use of NVivo helped to reduce the burden of manual coding, such as the copy-cut and paste process, which would have taken a longer time. The use of NVivo was an effective and efficient process (Zamawe,

2015), given the large quantity of ethnographic data that needed to be analysed (Fetterman, 2010). However, as depending on software extensively might reduce deeper immersion and familiarity with the data, and may also require some experience (Hammersley and Atkinson, 2007), I printed out the generated codes and labelled them manually, particularly final codes.

During coding, important sections of text were identified and labelled as 'nodes' related to themes in the data. Boyatzis (1998) suggested that a 'good code' (p.1) is one that captures the qualitative richness of the related phenomenon. As coding continued, all codes were considered as important, but those codes which are most dominant are categorised to identify repeated patterns (Fletcher, 2017). For example, with few exceptions, most of the participants repeatedly described the purpose of ANC visits as to 'obtain the handbook' and 'perceived benefits'. The coding continued for all data sets interviews, FGDs, and PO, which were sorted into segments so that meaningful concepts of participants' perspectives were generated. The concepts were organised into parent nodes and child nodes in order to compare and generate patterns that provide meanings to the beliefs and practices of the study participants (Roper and Shapira, 2000).

Therefore, the concepts that came out repeatedly in the text were considered as categories that formed themes, which were saved for the next stage of analysis in NVivo 12, for example 'perceived benefits', 'resources', 'gender role burden'. As I continued coding each new transcript, the themes and sub-themes that emerged were added into the existing coding scheme if there were similar existing thematic nodes, or if new nodes were created for novel themes. Several questions guided the coding process, such as:

- What word in the data indicates the participants' perspectives, and why?
- What phrase indicates barriers or facilitators to ANC use, and why?
- What are their experiences?
- How do the participants describe these factors?

Such questions allow researcher to seek for deeper understanding critically and reflectively (Fletcher, 2017, Mason, 2002).

3.7.2.3. Naming and describing the themes

After the initial coding, data were sorted and organised into potentially relevant contextual codes to create themes. Assessing the data within categories and groups gave an idea of the initial themes and sub-themes. I continuously re-evaluated and discussed the emerging themes with my supervisors as the iterative process of data analysis continued, until key themes were clearly defined. The data was then categorised into the main overarching themes, with several sub-themes for each group of participants. For example, in the women's interviews, I identified ANC benefits, social and infrastructural issues, cultural, and resource limitation as themes that women perceived to shape their ANC use. Data analysis and the generation of themes for all the groups (TBAs, and men) followed similar patterns in identifying collective perspectives regarding factors influencing ANC use (Barbour, 2005). This stage continued until no new themes emerged.

Following identification of the sets of themes, each theme was reviewed to consider if they formed coherent patterns. The themes were reviewed to check if they accurately reflected the meanings evident in the whole data set (Braun and Clark, 2006). Those themes that were specific enough and related to the broad set of ideas were selected. The iterative process assisted me to organise and name the themes into what aspect of data they captured. I started writing detailed reports about each theme for each group, in order to provide explanations on whether the claims made in relation to the data were credible (Braun and Clarke, 2006). Direct quotes of participants' views were used to support each theme. A codebook (summary) and detailed explanation of the themes and sub-themes for each group with the supporting quotes were printed out and discussed with supervision team. Figure 11 illustrates a summary of the data analysis phases. Finally, data across the groups were

integrated and a theoretical explanation was provided in the last findings chapter, as explained below.

3.7.2.4. Abduction and Retroduction

Critical realist data analysis involves the process of abduction and retroduction. After the initial empirical findings of the coding process, the critical realist data analyst goes beyond naming and describing themes to explore more deeply, identifying the real mechanisms or structures behind why the event being studied occurs (Fletcher, 2017). Abduction is a thought process that involves moving beyond thick description of data. Retroduction is the final process that explains how the structures influence the events through describing the phenomena to identify underlying causal forces, in this case causal mechanisms and structures contributing to pastoralist women's attendance at ANC. The difference between the abduction and retroduction is that in abduction the process involves determining the structures that impact on events being described, while retroduction explain complex causal forces that impact on events (Fletcher, 2017).

For instance, in the current study, the key empirical level findings that were experienced and observed related to the participants' explanations of multiple access challenges and the need for ANC, which determine pastoralist women's utilisation of ANC services. Participants' explanations of multiple access challenges were important and indicative of the real levels of need and use. However, their persistence and repeated emphasis on the need for attendance at ANC to obtain the handbook made me to look beyond mere access barriers.

For example, women attended the ANC clinic despite several access challenges to obtaining the handbook due to perceived benefits; in this case the handbook is a structure that causes the event (attendance at ANC). Looking deeper, the need for the handbook is embedded in the requirement that to receive the perceived benefits, women needed to attend ANC. The

government policy is manifest in community perceptions of the need for the handbook, which is thus an underlying cause of this actual event (attendance at ANC). Consequently, the real causal mechanism that made attendance at ANC possible was government policy. However, multiple access barriers made regular ANC use challenging for pastoralist women. Retroduction aims to explore to answer what could be true about the world (Decoteau, 2016), in this case ANC use, and to discover unexpected key finding that contribute to original knowledge. The government policy as manifested in the perceived benefits of ANC use (e.g. the handbook) made initial access possible, although the multiple structural barriers impeded desire for subsequent visits, leading to partial utilisation of ANC. The back-and-forth process of identifying these structures and underlying real mechanisms made critical realism relevant to exploring the causal factors of attendance at ANC more deeply.

3.8. **Ethical Consideration**

Ethical considerations in this research included institutional approval (as explained in section 3.6.2), informed consent, confidentiality and anonymity, and power relations, as explained next. The current study posed no ethical risk to the participant groups (women, men, TBAs, and nurses). However, addressing ethical consideration in any research involving humans is essential, particularly when vulnerable populations who are prone to coercion are involved (Wright, 2000). This is particularly important in the current study, as Eneyew and Mengistu (2013) expressed that pastoralist women have diminished autonomy, facing double marginalisation for being a woman and being a pastoralist. Thus, they might be a vulnerable group, hence, a need to maintain confidentiality, offer respect, and maintain freedom of choice to participate in research without undue coercion. The studied population generated specific considerations because they were:

- Women (young pregnant women, elderly, and postnatal mothers)
- Those who could not read and write

Therefore, I was sensitive to these issues and all participants were dealt with sensitively. I consciously avoided causing any risk of harm to the study participants, and others living in the villages and those in health facilities at all times. Since the research also dealt with pregnant women, I remained alert to any issues that may require professional help during the field visit and contact details for locally identified health personnel were available. Furthermore, throughout the data collection period, I considered the following ethical issues to ensure the participants' respect and dignity were maintained.

3.8.1. Informed consent

Informed consent involves researchers discussing with participants the benefits and risks of participating in research, so that participants make decisions about participation in the study (Nusbaum et al., 2017). Sánchez et al. (2000) emphasised that informed consent among the vulnerable populations, such as those who are unaware of their rights and who are illiterate, are of concern for many researchers. Therefore, considering that pastoralist communities are perceived as marginalised and have low literacy levels (Huka et al., 2001, Schelling et al., 2008), obtaining informed consent prior to the interviews, FGDs, and observations was considered particularly important in the current research.

The consent process was done at the participants' homes for the women, TBAs, and men, to avoid disrupting their daily routines and work. After full explanations of the purpose of the research and reasons for their inclusion, participants were given opportunities to ask any questions related to the research and were given time to decide whether they wished to participate. I had initially anticipated interviewing those aged 15 and above, because of the reportedly high teenage pregnancy rate in the area of 17%, and one in five teenagers by age of 15 years is reported to be of childbearing age in Marsabit County (KDHS, 2014). However, only those aged 18 years and above were identified during data collection, and this group are considered capable to give consent to participate in the study according to national legislation (The

Government of Kenya., 2008), hence no parent/guardian approval was required. Similarly, the majority of the participants could not read and write, therefore thumb prints were obtained as their mark of consent, but some participants preferred to provide only verbal consent, and did not wish to provide either a thumb print or written consent, despite explanation, and their requests were respected.

I explained to the participants that the decision regarding participation in the study was entirely voluntary. I also emphasised to all participants that they could withdraw at any time without penalty or affecting their future medical care at the health facility. No data collection was undertaken before informed consent was obtained.

3.8.2. Confidentiality and anonymity

The confidentiality of participants is protected for privacy and to ensure trust, as ethically required to maintain research integrity (Baez, 2002). According to Kaiser (2009), participant confidentiality needs to be maintained throughout the stages of research, from planning to dissemination of results. The research assistant and I were guided by the ethical and legal practices to treat and keep participants' data with the utmost confidentiality. No participants were referred to by their real names in the recorded information; instead, the researcher created and used pseudonyms so that a participant's identity would not be recognised. Other research documents and the electronic database were also allocated pseudonyms. Where direct quotations were used to illustrate a point, pseudonyms were used. Participants were assured that any views expressed remained anonymous.

3.8.3. Power relations

In qualitative research, several factors influence the relationship of the researcher and the researched, such as age, appearance, social class, culture, knowledge inequality, power, environment, and gender (Baxter and Eyles, 1997, Richards and Emslie, 2000). In the current research, given my health professional status, educational background, and urban identity, numerous factors of a power imbalance with research participants can be inferred. Hammersley and Atkinson (1993) emphasised that power imbalance between the researchers and the researched is inevitable, even when researchers are committed to ethical positions. Therefore, informed consent, explanations to the participants that the researcher is a student and providing participants time to make voluntary decisions to participate in the current research gave the participants more control over their decision to participate or not. This was meant to mitigate unequal power imbalance between myself and the participants (women, men, nurses, and TBAs) (Evans and Becker, 2009, Thomson, 2008), which might arise because of possibility of perceived social class, level of education or urban identity as in the current research.

Participants were allowed to make choices about the time and place of their interviews prior to the interview date to provide them with more control over the activity. Prior to interviewing I also established rapport, engaging in informal conversations and self-introductions with the villagers. This was aimed at creating a welcoming and nonthreatening interview environment, and to establish a conducive environment for the participants to share their experiences and beliefs on ANC practices (Karnieli-Miller et al., 2009). Except when probing and prompting to clarify points and ensure the continuity of the interviews, I avoided giving the impression of expecting specific responses as the research questions were asked (Tisdall et al., 2009), instead encouraging participants to continue with their stories.

Similarly, when a young unmarried woman with experience of pregnancy before marriage showed feeling of sadness and distress about her prior experiences of social isolation during the pregnancy, I did not force her to

continue with the interview, instead offering to suspend it until a later date if she wished; however, the young woman preferred to continue. This was acknowledged as an expression of painful memories triggered by the current interview. Throughout the data collection process, the participants were constantly engaged, checking their willingness to continue with the interviews, and they were informed that they were free to opt out at any time. In addition, the quality and the trustworthiness of the research process was enhanced, as discussed in the following section.

3.9. Strategies to enhance quality and trustworthiness

In qualitative research, the trustworthiness of the study is enhanced by addressing the confirmability, dependability, credibility, and transferability of the findings (Lincoln and Guba, 1985, Anney, 2014). To establish credibility of the qualitative research findings, the researcher is required to present the correct interpretations of participants' original views (Graneheim and Lundman, 2004). In the current study, I engaged with the participants for a period of six months, conducting research at the village level, and observations at the ANC clinics. This was meant to explore the core issues that influence participants' ANC practices. Such engagement with the participants in their own setting enhanced the credibility of the research (Anney, 2014). Similarly, during the data collection, analysis and writing, I continuously engaged with the supervision team, seeking their support for scholarly guidance to improve the quality of the data collection and analysis, to enhance the quality of the study findings. In addition, the following strategies were adopted to enhance the credibility and trustworthiness of the research findings.

3.9.1. Methodological fitness, triangulation, and purposive participant selection

The congruence between the philosophical paradigm, methodology, and the methods was aimed at enhancing the quality of data gathered (Nicholls, 2009a). Purposeful sampling of multiple groups of participants with different demographic characteristic generated rich and varied perspectives on factors influencing ANC use, especially with the selection of multiple sites (six villages) with similar geographical locations and cultural practices (Merriam, 2009). In addition, multiple methods of data collection, such as individual interview, FGD, and PO were used to obtain corroborating evidence and enhance deeper understanding of the issues relevant to the research question. The multiple methods were used for triangulation to facilitate and understand the same issue being investigated (e.g. barriers and facilitators to ANC), sought to reduce potential bias, and allowed for the cross-checking of the integrity of participants responses (Anney, 2014). This was consistent with the CR and FE approach, which aims at understanding the causal mechanisms of the phenomena being investigated through multiple approaches.

The in-depth iterative data analysis process considered more than one viewpoint, looking at similarities, differences and outstanding views from the participants (Creswell and Miller, 2000). This was also aimed to enhance quality of the research findings, as it continued until no more themes emerged (Simon, 2011).

3.9.2. Reflection on research process and addressing reflexivity

In emphasising the meaning of reflexivity in qualitative research, Berger (2015) stated that the reflexivity is about:

> *'turning of the researcher lens back onto oneself to recognise and taking responsibility for one's own situatedness within the research and the effect that it may have on the setting and*

people being studied, questions being asked, data being collected and its interpretation' (p. 220).

Berger's (2015) definition of reflexivity as a continuous process of self-reflection on one's position in research process illustrates that the researchers' position could affect research outcomes based on three researcher roles:

- *Insider role* – they belong to and share the experiences of the study group (e.g. in terms of gender, ethnicity, sexual orientation, and age).
- *Outsider-position role* – while assuming the position of insiders during the research process.
- *Outsider role* – not sharing the experiences of the participants or the study phenomena.

In the current study, I assumed the first and second roles of positionality, thus reflexivity is critical in order to account for my own subjective role in extrapolating findings from the emergent data. Qualitative researchers need to explain their predispositions and assumptions regarding the research process (Merriam, 2009), in order to create honest thought in the findings, knowing that they are an instrument in research (Hansen, 2006), which could influence both data collection and analysis (Gerrish and Lacey, 2006).

Similarly, the findings and the conclusion of the study are shaped by the researchers' worldview and background, which influence the way the world is constructed, their use of language, questions asked, and how the researcher chooses to organise the information obtained from participants and make meaning of it (Kacen and Chaitin, 2006). In this context, the use of critical realism influences the research process. Therefore, in reflexivity I needed to continually acknowledge my positionality and its potential impact on the study process and outcome (Berger, 2015).

For FE, reflexivity is an important aspect, especially when the researcher is familiar with the culture being studied (Cruz and Higginbottom, 2013). For example, in the current study, I was a native of the area, a wife, and a mother and previously worked as a nurse in public healthcare facility (though not in the study area). I also have theoretical knowledge of the issues being studied,

and some common cultural similarities and social identity with the participants. Such characteristics could influence research process, either positively or negatively, thus, reflexivity is crucial in the current research.

Therefore, for the current study, the insider aspect gave me some research advantages, as I found it easy to enter the study field, and easy to recruit. The hospital staff members' assistance during the recruitment of the participants was noticeable and was likely a result of a shared cultural and professional identity, whereby most villagers willingly accepted to participate in the study. The following extract from field notes describes this:

> *I was very happy when I started my data collection in Marsabit County, this was due to many reasons, the main one being that this pastoralist community was where I felt I belonged. I was born and raised by pastoralist family, so I identified with their pastoralist way of life*.

Similarly, considering the nature of the interviews I had with the pregnant women and postnatal mothers, all the mothers were willing to be interviewed and to give their perspectives to use of ANC. However, an interview with a 21-year-old unmarried pregnant woman who had her first child at the age of 17 vividly showed how she was traumatised and ashamed for being pregnant before marriage. During the interview there was long silence in between our conversations as she narrated her experiences. On reflection, I wondered about the assumed level of trust that was established with the young woman which resulted in her disturbingly discussing the nature of her traumatic experiences, which made her feel isolated with her first pregnancy, and affected her ANC attendance. Reflecting on my interviewing techniques, the interview questions were open-ended, and I was not asking questions in a manner that might cause distress, particularly about pregnancy before marriage, which was considered as bad taboo in the community. Therefore, I concluded that there could be a possibility that the young woman suffered the hidden pain of rejection on her own, and when I gave her the opportunity to share her experience of ANC attendance, she narrated it emotionally as a cathartic experience.

My own experiences as a native of the area and the prior literature review shaped the type of participants selected for the study, and the identification of those deemed to have influence over ANC use in the community. An understanding of the pastoralist ways of life of animal rearing also helped me to determine the best time to interview certain participants, such as the men. For instance, men were mostly available in the early mornings or late in the afternoon, because of either grazing animals or being engaged in casual labour, hence in most cases FGDs with men were conducted in the morning hours.

In this community, strong respect for elders is an important cultural imperative. As such I had to anticipate and accommodate the concerns of men and older women, quickly reassuring them that I am student doing research for educational purposes. In addition, I dressed according to the expected social norms when conducting interviews with elders in this community, such as covering my head, as way of respecting elders and indicating that one is a married woman in the community. This also contributed to identifying with the community, reducing the perceived power position between me as a researcher and healthcare professional, and community members, thus enhancing more open interactions for in-depth understanding.

My knowledge and fluency of local dialects and being from the region gave me the advantage of closeness with study settings and some informal interactions during FGDs and interviews, leading to immediate openness among the women, and hence contributing to freer interactions. I assumed this openness to be because of a perceived shared understanding of women's roles in this community. Therefore, in order to corroborate evidence and to enhance deeper understanding of the research question, it was important for me as a researcher to consciously keep a distant role. This reduced my familiarity with the women's role and my being perceived as one of their own, which may have adversely influenced data collection and reduced subjectivity (Berger, 2015).

Generally, for men, the openness and free interaction during FGDs was limited, as men were seen to be cautious about sharing information. As the following field note extract describes:

> *During FGDs with the men, it was a little difficult to obtain in-depth information from men, as many men kept referring to ANC as women issues, and they have no roles. In fact, some wondered why I needed to discuss with them women issues. It took more probing and prompting to obtain information related to ANC from men.*

I concluded that could be either that men do not have knowledge of the studied topic, or because of the patriarchal nature of pastoralist communities, whereby men dominate decision-making (Ogundairo and Jegede, 2016, Caulfield et al., 2016), which may have contributed to limited level of interaction and information sharing.

I was aware that the researcher's positionality could influence the participants' responses as the researcher might be viewed as a powerful person (Richards and Emslie, 2000, Taylor, 2005) (see section 3.8.3), requiring mitigation of the implicit power relation. In the current study, this could arise because of the researcher being a health professional, living in a bigger city and being educated, which might be intimidating for the participants, who were uneducated and living in rural settings. This could lead to the possibility that participants could provide socially desirable responses during the interviews and FGDs, expressing what they might have felt the researcher wanted, and which would reflect positively on them (Kühne, 2018). This was anticipated and mitigated, as explained in previous sections through adopting multiple methods, a range of perspectives and addressing power relation.

In addition, there was a voice in me that identified with the pastoralist community's way of life, and my assumption that they face challenges. This assumption about pastoralist community challenges was particularly poignant on one occasion during field visits, when I encountered a young mother by the roadside (accompanied by two women), who just had a baby on the way to the nearest health facility. I was morally obliged to assist the young mother to the nearest health facility. I thought the assumption and the encounter permitted me to see why pastoralist women do not always use healthcare services (i.e. due to logistical and geographical barriers to access), as observed in this

particular encounter. However, I thought that such reaction might tint the way I collect, analyse, and interpret data. Thus, throughout the process, I maintained a conscious critical distance in order to capture participants' experience as theirs, documenting what they said, and what I thought about it as a researcher (Berger, 2015). I ensured self-awareness of my position in the study while questioning and obtaining the participants' experiences, without supporting or disagreeing with their sentiments, unless when prompting and probing to clarify responses. Maintaining daily field notes of all the activities in the field (Finlay and Gough, 2003), and the memos, helped to compare my previous assumption and expected outcome in the study (Richards and Morse, 2007). Daily reflections and memos of the activities and my thought process were all aimed at maintaining transparency throughout the research process.

Similarly, supervision meetings guided my critical thinking and self-reflection during data collection, analysis, and writing up the findings. The fact that my supervisors are of a different contextual background from my own was helpful, as they raised critical questions that prompted reflexivity and allowed for further explanations of the research process to enrich the research findings. In addition, the theoretical knowledge, use of empirical data, and the research objectives helped to inform the themes during data analysis to reduce bias, I critically sought and to reflect on how it both related to existing literature and produced new knowledge.

3.10. **Conclusion**

This chapter described the philosophical stance that guided this study process, the study design (FE), data collection strategies, and the data analysis process. Multiple data collection strategies were used to triangulate and improve the quality of the research, which is congruent with the study design and philosophical stance. For this, PO, which is a strong tenet of FE, was included to provide insight into nurse-women interactions, to corroborate the interviews with nurses and women, and for triangulation.

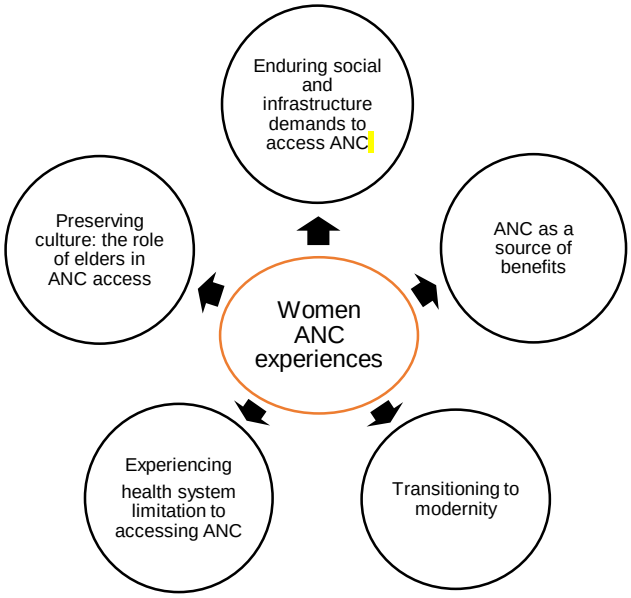
Use of FE was critical to explore the distinct culture of pastoralist community, since no previous studies have been undertaken on their ANC experiences. The next chapter presents findings from women interviews, followed by chapter five that provides views of significant others on factors influencing women ANC use among pastoralist community.

CHAPTER 4
WOMEN'S EXPERIENCES OF ANTENATAL CARE SERVICES

4.0 Introduction

This chapter presents a range of issues that women perceived influenced their utilisation of ANC services. The key issues that shaped their experiences and ANC uptake include, pastoralist lifestyle, roles and infrastructure demand, the impact of cultural beliefs and limitations in the health system. These issues which existed both at the community and health facility level diminish women's agency to access ANC services. This chapter also presents data on women's perceptions of their reasons for attending ANC. These include the need for the handbook and perception that ANC is a safe and new approach, this perception is common among younger women. The need for the handbook has emerged as a key issue as attributed to its perceived benefits which are for the unborn child, women, and the family. This need for the handbook, combined with perception of being denied care during postpartum period if the handbook was not obtained, was a key aspect of concern for many women that facilitated attendance at ANC. This also became a significant concern as the need for the handbook was further associated with the future needs of the unborn child e.g. child immunisation and schooling. This believe had contributed to a strong association with attendance at ANC. In their views, women commonly used the terms 'to confirm foetal status' and 'handbook' as an important reason for attendance at ANC. This was reflected in their emphasis on making an effort to attend ANC, despite the multiple access challenges. Thus, the chapter builds on the following key themes that women perceived as influencing their ANC experiences, as summarised in Figure 12.

Figure 12: Key themes about women's ANC experiences



4.1. ANC as a source of benefits

This key theme demonstrates the perceived benefits of ANC are the most important element. Women mostly emphasised in general terms the importance of attendance at ANC as to (i) obtain the handbook for its perceived benefits, (ii) confirming foetal status. The need for the handbook emerged as a key driver for almost all the women to attend ANC due to its associated benefits. The value attached to the handbook as an important document-that gives access to several government services. These include referral letter in case a referral for further medical or obstetric management, future child immunisation (the handbook has detail childhood immunisation schedule), and a gateway to gaining a birth certificate (e.g. the handbook as a source of childbirth information), which is a requirement for enrolment in school. For most women the need for immunisation and education emerged as key driver for making the effort to obtain the handbook, as it was believed to help their children to enroll for schooling, hence positioning them appropriately in the social world. This suggested that the handbook was central to the utilisation of ANC services. However, there was also a feeling of ambivalence if the handbook was not obtained, as accessing government

services was perceived as difficult, hence prompting women to attending ANC. In addition, there was a sense of reassurance when the foetal heart was auscultated, unlike when pregnancy is kept at home without knowledge of its progress. This acted as another motivating factor to attend ANC, particularly for many young women.

Women's awareness of the importance of the handbook for the future of the unborn child exerted a positive influence on attendance at ANC. There is strong perception among many women that in the contemporary world, the need for the birth certificate for child schooling is a priority of which the handbook is needed (as related to childbirth information). According to many women, this was not a concern in the olden day. Affirming all women's perceptions, Quri a mother of nine explained the importance of obtaining the handbook for its benefits and the main reason for women attending ANC.

> *'To go to the clinic the handbook is one important reason why many of us go to clinic and you cannot get unless you go there'. If I will not have gone for pregnancy clinic my children will not get birth certificate… they also wants us to deliver in hospital…I need the handbook for future record…you see if I have the handbook all information will be there… Eeh… these days, this thing (birth certificate) are very important not like our parents' days.' (Quri, 38 years)*

Similarly, the handbook was seen by many women as a means to access other government services including referral to the main hospital when further pregnancy related interventions or management are required. Whereas failure to attend ANC clinic and getting the handbook meant that obtaining the referral letter might prove difficult, hence another reason for attendance at ANC to have their pregnancy record maintained in case the need arises for referral to another health facility.

> *'if I did not go to clinic even the referral letter to other bigger hospital if I get any problem I will not be given, because they will say I haven't gone to clinic, they will not agree without clinic booklet…you see they say…they do not have our record…. they will…but is a big problem.'* (Gure, 26 years).

As the need for the handbook emerged as a priority for all the women, there was also an ambivalence associated with the failure to obtain it. This seemed a driving force for majority of women to make the effort to attend the ANC clinic. In addition, the majority of women reported the handbook as a requirement to obtaining the birth certificate which was needed for future enrollment in school.

> *'These days, they even say if you do not attend clinic, have the handbook…deliver in hospital, you will have problem with birth certificate for the children in future, that record when child is born is important….in todays' world without birth certificate the child will not be enrolled in school.'* (Naomi, 29 years)

Prompted by the perceived consequences of not obtaining the handbook, such as possible denial to access perceived benefits, many women reported attendance at ANC. Although it appeared to be a coercive approach, this could be a strategy for getting women to use the ANC and delivery services, as some may not have attended without such conditions.

> *'If I don't go to clinic and only bring the baby for immunisation, like some women do, the nurse will ask for the clinic booklet and if you said I do not have she will tell you off...threat us not to immunize the baby, yes she will, although, she will agree anyway* [laughing]*, to avoid all this we go to clinic and get the book.'* (Wari, 31 years)

Apart from the symbolic meaning of the handbook as a gateway to accessing services, for many women attendance at the ANC clinic was also seen as an opportunity to confirm the foetal status, a view commonly expressed among young women. Although this was perceived as a priority, they did not mention the need for their own health check. For instance, Arbio and Mulii, who are both pregnant expecting their first and third child respectively, they expressed feeling reassured when the foetal heart was auscultated. In addition, the two women further compared the olden day's pregnancy care to contemporary care, concluding that the contemporary care was a better option to monitor the unborn child's health progress, hence influencing ANC uptake.

'I go for this clinic so she (nurse) will touch the stomach (womb) and tell me if my baby heart beats…we can't do that at home, they said it is good to check your baby...' (Arbio, 18 years)

'with something in the stomach (uterus) and you don't know what it is and how it is, you should get worried though going to clinic will not solve all our problems, we can't stay home like my parents, not going is not reassuring.' (Mulii, 29 years)

4.2. **Transitioning to modernity**

This salient theme suggested pastoralist women in this study are in the process of transition with traditional pregnancy care practices, trying to give way to using contemporary care during pregnancy. Despite the traditional beliefs about pregnancy disclosure and the older person's influence (as will be discussed next), some younger women commented about the changing traditional norms regarding pregnancy care. This perception altered some women's experience of pregnancy, as contemporary care is seen to offer benefits e.g. to confirm foetal status, and the contemporary care is viewed as a safer option as compared with traditional practices. Although older women also mentioned this as an emerging issue, it was mostly reported by younger women. As contemporary care is perceived as a modern or 'new change' that they aspire to adapt to, while the practice of traditional pregnancy care is gradually changing to modernity. In addition, some young women seemed to contrast with older women, who compared traditional pregnancy care practices and contemporary care, questioning the need for the latter. This suggested that attitudes towards contemporary care are changing, as young women seem to be re-evaluating their pregnancy care practices, showing a positive attitude towards ANC. Perceptions about ANC as a new concept from government was also another factor influencing their attendance at ANC. Women perceived that government expected them to attend ANC clinic.

For young women who described the value of attendance at ANC as an opportunity to monitor the pregnancy progress, even their parent's limited understanding and beliefs about need for contemporary did not stop their desire to attend ANC. This may suggest the younger generations' realisation of need for contemporary care, hence influencing attendance at ANC positively.

> *'Our parents did not go for their own reasons, now we go for ours, the past and the present time is all different… they ask why I go. I cannot stay home…like olden days and yet I do not know what is going on with my baby.'* (Arbio, 18 years)

Prompted by such moments where value is placed on contemporary care as a safer option, some young women reported attending ANC to confirm their pregnancy progress, in particular 'foetal heart' (foetal heart auscultation), despite elders' influence. This positive health seeking-behaviour among the younger generation suggests a generational shift in attitudes.

> *'Olden days beliefs our parent stayed home saying no need for clinic, God protect baby, to me the same baby God has put there in stomach (uterus), I would like to know how my baby is.'* (Shanuti, 20 years)

The perception that ANC is a '*new way of life'*, appeared to also influence the need for attendance among some women. Speaking of her previous pregnancy experience, Haru a postnatal mother felt that the olden day's approach to pregnancy care was 'outdated', she needed to embrace and adapt to the new practices which are perceived as modern. This suggested desire to move away from the past, towards the perceived new way of life, which is at hand, was positively influencing health-seeking behaviours.

> '[laughing] *those olden days belief that clinic is not necessary is outdated, we are not in olden days practices, we are in new way of life, we need to move with it…'* (Haru, 23 years)

For majority of women, attendance at ANC was attributed to the changing way of life that women perceived as inevitable, and ANC was viewed as one of

these changes. Mulii's use of the metaphor, '*you can't put one leg in the past practices and the other in the current'*, illustrated that there was a past which women followed (traditional pregnancy care) and the new changes (contemporary care) which women are expected to adapt to. Hence the need to transition to using the contemporary new form of pregnancy care. This suggests that the contemporary way is influencing women's health care practice.

> *'When the way of life changes, it is good you change with it. You cannot put one leg in the past practices and the other in the current, we have to change with the changes. This clinic is our new way of life, so we need to accept it and live with it or else we are either here or there, that is why I go.'* (Mulii, 29 years)

Some women perceived this new contemporary care as a government directive, which they needed to follow, even though the traditional practice was also valued. For some women contemporary care was perceived as an emerging new form of pregnancy care and was exerting pressure on the community in respect to choices for pregnancy care, influencing attendance at ANC.

> *'The way we do things in the past has changed, those days our mothers stay home not going to clinic, children are ok* [laughing] *even me I did not get any immunisations, you see I am ok, our old ways are good also…our traditional mothers take care of us…, but things have changes…even them they say we go to clinic, this is our life we must live with now, government want all to go to clinic.'* (Naomi, 29 years)

In addition, there was strong view among some women that attendance at ANC was a mandatory directive from the government, and because of the fear of consequences of non-attendance, many women reported making effort to attend the clinic. This might be a government strategy to enhance attendance of ANC clinic, for which some women may not have attended. It, therefore,

demonstrates government role in enhancing maternal healthcare service delivery.

> *'all this comes from …hospital, if you do not go you, you will be in trouble, it is government that wants everyone to go, and they say people must go. Even the nurse comes to the villages sometimes and asked who hasn't gone to the clinic.'* (Wari, 31 years)

The above findings suggest that women's positive judgements about both system of pregnancy care (traditional and contemporary) influence their ANC use, as it coexists in this pastoralist community. Most of these views on transition to modernity seem to come from younger women and from those living in village closer to HC, suggesting age and proximity to healthcare may have an influence on attitude towards healthcare.

4.3. **Preserving culture: the role of elders in ANC access**

In this theme women cited a few cultural beliefs and practices that shaped their ANC access and use and the roles of elders in influencing their ANC use. These relate to early pregnancy disclosure, community attitudes to out of wedlock pregnancy, and spiritual beliefs. According to many women, preserving cultural practices was mainly advocated for by older men and women, and it influenced early pregnancy disclosure, even when the pregnancy was recognised, leading to delay ANC use. This may suggest that older people are custodians of the culture, hence their desire to ensure the passage of such beliefs and practices to the next generation. Protecting cultural norms also meant pregnancy before marriage was strongly discouraged, and any woman that became pregnant before marriage was denounced and considered a social outcast. As such, due to the impact of cultural practices and stigma, young unmarried women were particularly likely to delay accessing ANC or failed totally to engage with ANC. Out of wedlock pregnancy in this context refers to pregnancy among young unmarried women

before marriage. Many women (married) believed that women with out of wedlock pregnancy avoided appearing in public, the pregnancy was kept a secret due to a fear of social reaction, stigma, and the likelihood of being considered an outcast. This may suggest an attempt to preserve the culture. Spiritual beliefs about pregnancy disclosure drew mixed views, as some younger women agreed with older women's views, describing their trust in the spiritual protection as sufficient, and that God controls their destiny. This traditional belief acted as a sense of fatalism, as some women believed pregnancy care was beyond their control, hence contributing to their perception about limited need for attendance at ANC.

For some women including 18-year old Arbio, the decision to engage with ANC early was shaped by her expectations to preserve the culture relating to pregnancy care and when to disclose. Women believed the culture was passed on from generation to generation, and it affected their desire for early pregnancy disclosure, meaning early engagement with ANC is limited.

> *'Also, in our culture we are not supposed to talk and show off our pregnancy in early stages…older people say so, our parent tells us not to abandon our culture, so we continue with our culture.'* (Arbio, 18 years).

Even in a situation as stated above, where pregnancy is recognised and women desire to access ANC, according to some women, older peoples' (men and women) understanding of pregnancy and their beliefs about ANC, that it might be of little benefit, led to a delay to initiate access to ANC. Some women belief older people see spiritual power as sufficient to protect the unborn child.

> *'the elders (our mothers and older men) say that the baby is formed, shaped and put in place by God, that he knows well about it and will bring it out as he wishes, they say why all this thing about the clinic.'* (Sarbio, 30 years)

In addition, for some women both young and old, this spiritual power acted as a social control, and contributed to them not recognising the need for ANC

visits, as they agreed with the older people's views about spiritual protection for pregnancy. This may demonstrate the influence of religious beliefs on women's health seeking-behaviours, and an attempt to preserve culture, or a lack of understanding the relationship of medical interventions and the religious beliefs.

> *'In any case God has already made and put the baby in place, he knows what will happen to it, God keep us well, why all this.'* (Kula 23 years)

> *'I do not see any problem even if I do not go to this clinic. God protects us, not humans.'* (Bilka, 39 years)

Many women perceived that for those women with out of wedlock pregnancy, the community refrained from talking about it, since such pregnancy is culturally unrecognized. Most women believed such pregnancy could be kept secret due to fear of social isolation and stigma when it is disclosed, including being considered an outcast. According to many women, this fear of community disapproval and stigma may have led to failure of out of wed-lock pregnant woman to engage with the ANC clinic.

> *'Those who become pregnant before marriage, no one wants to know in our culture, they are out casted, we do not like it, it is bad in our culture, I don't think they go, they hide their pregnancy until they give birth.'* (Haru, 23 years)

Relating to this, Shake a young mother of one, recalled her struggle to accept her own experience of out of wedlock pregnancy. Reflecting on the community attitude towards out of wedlock pregnancy, Shake reported that she felt socially isolated for being pregnant before marriage. According to Shake, the deeply rooted culture about pregnancy before marriage also made TBAs to not provide supportive roles to women with of out of wedlock pregnancy. However, she felt that it was the fear of rejection by family and community and being considered an outcast that made her and other women with out of wedlock pregnancy to avoid public appearance and keeping their pregnancy a secret as much as possible. She expressed need for the community to accept women with out of wedlock pregnancy.

'I was withdrawn from public for over months, you see I was just, 17 years old. I did not tell my mother until when I was five months pregnant when she discovered I was pregnant. She cried and me too. She told me to go out of the home to neighbouring community before people notice that I was pregnant, but I refused. I went to hospital at six months when I started feeling pain in the lower abdomen, even the traditional midwife I approached refused to help me. The community do not like us; they consider us an outcast. I wish they stop this culture; this culture is bad; our community need to abandon it' you just suffer alone.' (Shake, 21 years)

The above findings demonstrate that cultural beliefs and practices shaped overall patterns of expected behaviours during pregnancy, influencing ANC use, particularly for those with out of wedlock pregnancy. The findings suggest need for engaging with the community sensitively to address the cultural issues, particularly for women with out of wedlock pregnancy to access ANC and be supported during pregnancy

4.4. Enduring social and infrastructure demands to access ANC

This theme relates to the women's perception that the decision to access ANC was shaped by several contextual factors. These include, their pastoralist lifestyle, their roles and responsibilities, infrastructure issues (e.g. inaccessible roads, long distance to travel, lack of available transport, and cost) and unfavourable weather patterns. For many women, these issues were interrelated, and diminished their personal agency to use ANC. The balance between the demands of daily chores, including those related to pastoralist lifestyle, and house chores, became a barrier to attendance at ANC. In addition, many women reported their own roles and responsibility increased when men travelled further afield with larger herds during the dry weather season, as they are left to manage the weak animals at home. Besides their role burdens, access to health facility was further challenged by restricted and

expensive transport options, harsh weather condition (hot temperature) and the long distance to the dispensaries. With such prevailing social and environmental conditions, many women reported their capability to maintain regular attendance at ANC was limited. With such responsibility burdens limiting their ability to access the ANC, social support from immediate family members', particularly husbands, may have given them opportunity for regular attendance at ANC. However, their availability, particularly regarding support with domestic roles was inhibited by nature of community perception of gender roles. In this context, many women perceived support was limited due to husbands' pastoralist lifestyle, traditional gender related role expectations, and their lack of understanding of the purpose of ANC visits.

However, for most of the women the desire to confirm their pregnancy status and foetal heart made them opt for the only available means of transport, a truck, which is rarely accessible, expensive, and uncomfortable. This suggest pastoralist women are active agents, utilising locally available structures to address the social problems (e.g. distance) that impede their desire to use ANC. In situations where trucks were not available, many women reported enduring long, difficult, and physically exhausting journeys. This suggest positive attitude towards ANC. It may also imply that the benefits of attending the ANC clinic outweighed the physical and gender related roles burden that challenged access.

> *'At least we go…you see it is very far, distance is problem, we start very early, sit under trees when tired in this very hot sun and continue with the journey until reach there, no transport, sometime truck which carry goats and are expensive, we cannot afford it many times. It is very far, but we go, at least to check our baby…. (Wari 31 years).*

However, a key issue for many women is difficult to maintain attendance at ANC due to heavy domestic chores, which was further compounded by the pressure of the pastoralist lifestyle of supporting their livestock needs. Affirming many women's views Naomi and Bilka mentioned many times they had no option but failed to attend ANC, instead attend to their animal's needs. In addition, there was strong perception amongst many women that these

animals are the source of their livelihood, hence were given priority limits their desire for regular attendance.

> *'Even if I would like to go many time, it is not possible, imagine every time it is either you are watering animals, you see I have to take them to the wells, collecting water, feeding weak animals, finding for them grass, children and other household work, at least I go check my child [laughing],' (Naomi 29 years)*

> *'There are many difficulties we face sometime, I want to go back but because of the work at home, I cannot, animal at home, someone has to take them out for grazing many times. I just say God and I go instead to graze my goats; we don't have anything else, these animals, which are my only source of my livelihood' (Bilka, 39 years).*

Majority of women felt husband's support with domestic roles and involvement in ANC clinics are lacking due to their roles of animal management which required them to travel further afield with the larger herds, taking them away for over a year or more, in search of pasture and water ('fora'), and they too lacked understanding of the purpose of the ANC clinic. Nonetheless, most of the women viewed pregnancy care and ANC visits as their responsibility, and men had very little to do with ANC clinic, except for financial support.

> *[laughing] 'Men! Do they real help, not much? They have no idea of this clinic; he will not accompany me, no, no. Men do not have anything to do with us, they do not know, if I needed money, I will ask him and if he has, he will provide for me, pregnancy is my role, mostly he is away with animals at 'fora' [moving far afield with larger herds in search for pasture and water'] for over year (Shanuti, 20 years).*

Reflecting on the above findings, women appeared not to recognise the need to involve husbands in their ANC clinic attendance. Women perceived pregnancy care as their affair and full-time responsibility, in addition to other roles, and men need not be involved. This may reflect the social construction

of gender roles, which seemed to impact on the support needed to access ANC.

It was widely accepted that involving husbands during pregnancy provided an important opportunity for the nurse to educate the man about the importance of the ANC, and their role in supporting their partner during pregnancy, birth preparations, and support with domestic chores. However, for many women, as exemplified by Bilachu, this perceived traditional role was justification for not involving the men in ANC clinic. Therefore, women seem to create unintended barrier to involving their husband in ANC clinic due to culture and perceived gender role expectations, as explained next.

> *'In our culture, men do not talk about pregnancy and accompany us to clinic, its women's affair, I don't ask him to come with me…it is my role' (Bilachu 23 years)*

Disagreeing with the above, Naomi stressed that there was no cultural reason for men not to engage in ANC visits, or provide support with household chores, the only limiting factor was men's perceived social embarrassment and fear of mockery. Alluding to many women's view, Naomi reported that men feared to be seen by other women at the clinic. However, while men's support may have reduced some of the responsibility burdens for women, allowing them to find time to access the ANC service, the traditional role division created the barriers. A limited number of women perceived that some men discussed ANC clinic issues with their wives. This may suggest the gap in interactions and communications between men and women regarding pregnancy care and ANC practices.

> *'No, I do not know of any cultural reasons why men do not accompany wife to clinic. My husband does not take me to the clinic or help with house chores, I think very few men even talk about this clinic, if at all any. It is embarrassing (laughing), because he might find himself the only man at the clinic and other women will talk about him. Men are more concern with their animals than their women's clinic issues, it is our affair,*

they say, clinic is our affair we decide when to go' (Naomi, 29 years).

Almost all the women reported that their mother-in-law lacked knowledge and experience of the ANC services. This limitation was perceived to influence some women's health-seeking behaviour, as some mothers-in-law questioned the importance of ANC visits, and failed to provide emotional support and encouragement to access ANC clinic due to their own lack of experience. For Arbio, an 18-year-old first-time mother, and many other young women, despite the influence of older women deterring her early engagement with ANC, she reported navigating her own ways to attend ANC. This affirmed her positive attitude to ANC.

'*She [mother-in-law] didn't go during her time so, she does not know the reasons why I go, she ask why I go to the clinic, she does not tell me to go either, being my first pregnancy I did not know where to start, I saw women with children going and I followed them (Arbio 18 years).*

Although the above views suggest that a woman's ability to access the ANC clinic was shaped by the social identity that defines her roles and responsibilities, the majority of women reported that such challenges of domestic chores and the lack of support from men did not prevent them from engaging with the healthcare services, to confirm their foetal health status and gain perceived benefits at least once. This health behaviour about confirming foetal status emerged across the group as a key reason for attendance at the ANC. There were many positive attitudes towards ANC use, such as providing the opportunity to assess foetal status to identify any abnormalities, suggested the ANC as a gateway to monitor health. It also provided women with the opportunity to exercise personal agency, allowing them to make their own decisions about what they perceived as important for their unborn child.

'… in any case it is my responsibility because the pregnancy is mine, I need to check my baby is ok and breathing and get the book (Gure 26 yrs).

The above findings on the pastoralist lifestyle, gender related role and burdens, and local infrastructure issues negatively influenced attendance at ANC. However, women's positive attitudes and desire for ANC, e.g. confirmation of foetal status is the key issue that made many to endure the challenges in order to access ANC.

4.5. **Experiencing health system limitation to access ANC**

This theme demonstrated the women's views about health system factors that shaped their ANC uptake and subsequent visits. The need for ANC services caused women to make physical sacrifices and travel long journeys on foot to get to the health facility to be provided care. However, the majority of the women felt that their expectations were unmet. The main reasons included, (i) resource issues at the dispensaries, and (ii) poor communication and lack of adequate information. Firstly, a major concern for most of the women was their experience of not being provided with the service they needed, due to a lack of resources at the dispensaries. This limitation led to them being transferred to a distant healthcare facility to obtain the services, a journey which many felt they could not afford. The provision of services was also perceived by many women as lacking or limited, due to the shortage and occasional absence of nurses from the clinics, and their heavy workloads. These limitations led to longer waiting time to be provided services. Many women found these experiences discouraging, especially since they had endured multiple access challenges, including distance and hot weather condition to access the ANC. This led some women to decide not to return for subsequent visits.

Attendance and utilisation of ANC services was also strongly shaped by women's expectations of the pregnancy related information, and their

understanding of the purpose of the interventions. Many women expected nurses to not only perform the procedure, or give the required interventions, but also to provide an explanation for the treatment, and help them understand. However, according to most of the women, these expectations remained unmet, raising concerns about the purpose of interventions, and this in turn influenced uptake of the services provided. One such concern involved information in the handbook, which many felt they could not make sense of, as the information was written in the English language, and they could not read, and yet nurses did not provide the explanation.

4.5.1. Resources issues at the dispensaries.

A lack of services at the dispensaries due to resource limitations was reported by many women. These resources included a lack of laboratory equipment for blood tests, a shortage of staff, limited clean running water, a shortage of maternal kits (gift pack given after childbirth), and ambulances for referral services. There was a strong perception amongst a majority of women that linked attendance at ANC to lack of equipment for blood tests. This may suggest that women had a limited understanding of the full purpose of attendance at ANC, apart from clinical interventions. In addition, their concern was not only for their experiences during pregnancy, but also their concerns about negative influences during childbirth. For instance, having childbirth on the floor due to a lack of proper infrastructure.

> *'Very important thing our centre here does not have equipment for delivery. Our health centre does not have all the equipment for blood test, imagine we come all the here and then go all the way to the main hospital, some people do not even come back after visit, some deliver on the floor, women spread their cloths on the floor and deliver on the floor.'* (Quri, 38 years)

Observation at the most of the dispensaries confirmed women's concern as indicated in the following extract from the participant observation notes.

> *A piece of paper written 'Hb and VDRL' was given to the woman and she was told to go to another health facility for the test and come back with the result during next visit. The nurse told the woman that they do not have equipment to do the test. The woman told the nurse that she doesn't have money for the test and she has to look for the money first. The nurse told her that she need to have it done soon. The woman appeared worried but walk out, she was to return with the result during next visits (PO).*

In addition, many women were concerned about the occasional absence of the nurses, due to their shortage and heavy workload, as it influenced how they were able to provide services and interact with them. Reflecting the view of many women, Sando perceived that nurses increased workload, and the sense of burn-out, may have contributed to their attitudes towards women on some occasion, e.g. shouting out at women. As such, the need for additional staff to ease the workload was suggested by some women. This finding suggested that physical and emotional burn-out due to a heavy workload placed an increased burden on the nurses, which influenced their relationship with the women, and their experience of ANC, according to some women. However, this did not deter women from seeking healthcare services, although it was discouraging.

> *'Imagine sometime, we walk all the way from here to there and the place is closed. I had to walk back again, I went there twice when I was pregnant with this girl and the place was closed. Waiting time is long, too long, you see she is one person dealing with many people, all sort of people. Nurse is good, occasionally when she is tired, shout out at us, she is human, she is all by herself the whole day, and she becomes grumpy* [laughing]. *This centre, does not have enough doctors… we need more nurses.'* (Sando, 34 years)

4.5.2. Poor communication and lack of adequate information

This study suggested that women experienced an information gap in relation to pregnancy care, in particular, they lacked an explanation about the interventions provided. This inadequacy of information shaped the experiences of most of the women when they attended ANC clinic. The perceived inadequate information access in this context refers to a lack of explanation or failure to provide adequate information to enable women to understand the purposes of the services provided.

Adequate information was desired by the majority of women when attending ANC, however a lack of the same contributed to hesitancy about uptake of the service provided. These included, (i) inadequate pregnancy related information, (ii) lack of explanation on the purpose of interventions (e.g. medicines), and (iii) a lack of information on HIV testing. For instance, some women reported having their arms 'tied' but did not link this with the measurement for blood pressure, and the nurses did not communicate the result. Also '*injections*' were given without an explanation for its purpose, except for the general response of '*everything is ok'*, which most of the women perceived as inadequate. For many women, such experiences created uncertainty and concern about the purpose of interventions, leaving them with a limited understanding. Nurses approach when conducting procedures such as HIV testing, without informed consent and counselling also presented concern for some women. This was further compounded by the perception that HIV testing was mandatory. In such cases, some women reported turning to their divine intercession for a favourable outcome on HIV testing, due to the fear of a positive result. A fear which they felt would have been lessened if nurses had provided them with more information.

- **Inadequate pregnancy-related information**

The desire for pregnancy-related information made many women press through the many boundaries such as distance, role burden and responsibilities, and transport difficulties to attend the ANC clinic. However, many women felt that the information provided was not adequate. For majority of women, as exemplified by Midino, an 18-year-old first-time pregnant woman who resides in a village that was over 20 km from the dispensary, having travelled on foot to seek ANC services, she felt the information provided was not convincing and felt inadequate, and that influenced her understanding. This finding suggested that inadequate information led to a feeling of dissatisfaction with the services provided, particularly if the purpose of the intervention was not well communicated.

> *'All she asks is how many months is your pregnancy…then you are told to go home, she need to tell us more, something more…different…or what, going all the way, look how far our village is. Yeah, ……. she put something on her ear and on my stomach saying she is listening to the baby breathing, then give me some tablets, which she said will help my body, checked my 'kilo' (weight), tied my arm with that thing, but did not tell you why. She told me my height was small and baby big, but didn't tell me anything more…she write in this book……then, said go home, nothing else…,' (Midino 18 year).*

Generally, across the dispensaries, there was minimal health education provided to the women during ANC visits, even though it does not require any resources apart from the nurses' time. As the following participant observation notes describes:

> *For the first-time pregnant woman, I expected complete health assessment, ANC profile and health education on the pregnancy issues, however, this was not observed, with*

exception of obtaining basic ANC profile and past medical history (PO).

Another concern expressed by many women related to the information in the handbook. Almost all women mentioned that the handbook contained a lot of written information, which the nurses did not share with them, even though communicating the content of the handbook only required nurses' time. As explained by Mulii a young pregnant woman, many women desired to understand the information in the handbook, but this was limited by the nurse's failure to provide it. As such, according to many women, unless one finds support from someone who could read to them, the handbook information had little meaning for many women in this study, as quoted below.

'There is a lot of information and pictures in it (showing me the handbook), but the nurses do not tell us at all. I have not heard or seen anybody saying that they have been taught, those who are lucky enough to have people who can read and tell them (Mulii 29 years).

However, the desire for information made participants like Kula to make the effort to understand the information in the handbook by guessing. This suggests women had the motivation and desire for pregnancy related information, although it was not provided, suggesting a need to support women to meet their pregnancy related information needs

'I did not know how to read; I make good guess looking at the pictures [laughing] (Kula 23 year).

The above accounts were also confirmed during observations at the clinics, as nurses were generally seen using the handbook as a record of the intervention provided, and the information in the handbook was not shared. Nurses were observed being more concern to clear the queues, rather than provide individualized care to the women. Besides, demographic data showed no woman in this study could read (no formal education), hence the information

in the handbook had limited value for the women. In addition, it was noted that information was written in the English language, suggesting women may not be able to make sense of, and having little impact on their ANC use.

However, despite this perceived lack of information and explanation, the fear associated with seeking clarification was linked to power relations (educated vs uneducated). A few women reported that the nurses were educated (gone to school) and understands what they were doing. In addition, a few women also felt questioning nurses was amounting to doubting her capacity and knowledge, hence avoiding questioning them. For example, when Gure was probed further about why she did not seek for clarification, she referred to the nurse as *'learned'* and knows more than her. This may demonstrate a power imbalance between nurses and the women, which may have contributed to the reason for a lack of seeking clarification, hence influencing communication and ANC uptake

> *You see...I did not ask her more…avoid asking. She has gone to school and know more than us…she is learned. I haven't seen anything different about what she does.' (Gure, 26 years).*

In addition, even though many women were concern about inadequate pregnancy related information, such statements were often followed by vague and low expectations regarding the sort of information required. This clearly illustrated that although women desired to have pregnancy related information, they were uncertain on what type of information they needed, suggesting a lack of understanding. This illustrated a gap in communication and information sharing, especially for the young uneducated first-time mothers, and women with a low level of education.

> *'Oh, a lot, even us we haven't gone to school [laughing], but tell us everything, she knows, I don't know' (Jirmo, 26years).*

Above was supported by the observation data at the clinic, as describes in the following participant observation:

The woman was seen given two different type of medication and was told that the drugs are good for her and baby. There was no further explanation about the medication. The nurse told the woman that she does not have AIDs, the foetal heart is 'ok' and the weight. I walk out after the woman and asked her informally why she did not ask the nurse for clarification about the care she was given like medication. She told me 'she is the doctor and the drugs is good if it helps her and her baby. She asked…what would I have asked her? (PO).

When talking about expectations and satisfaction with interventions provided, for many women this was linked with how much information was provided and their perceptions of what was adequate. Talking about her previous experience, Shake reported that nurses at the main hospital shared a wide range of pregnancy related information, unlike at the dispensary. This account seemed to agree with the earlier statements on the limited information by many other women including (Mulii, Shanuti, Jirmo and Naomi), and particularly by the first-time mother Midino's perception that the services provided are inadequate and that influence ANC uptake. This lack of adequate information was perceived to have contributed to the women not returning for regular visits to the dispensaries.

…….yah in any case the services given here is the same, always the same, nothing much, in main hospital you are taught a lot, on food, baby. I do not know, but here nothing like that, I think that is why many people do not want to come back after first visit, those who have had experiences …..' (Shake 21 years).

As such for many women, the concern is the lack of a teaching element. Apart from the clinical interventions that included checking maternal weight, medication and foetal heart monitoring, many women perceived that more should be provided. Voicing many women's views, Naomi termed the services as a '*check-up'*. This influenced her ANC uptake, and subsequent visits.

'I go, but the reasons for going, I think is mainly to check the baby, check-up, I do not know apart from that, yes, she touches the stomach (uterus) and give me the tablets, blood pressure, oh yeah, check for AIDs and I come back home, no teaching (Naomi,29 years).

- **Inadequate explanation of treatment provided**

A lack of an adequate explanation about the intervention created uncertainty and little chance to understand the purpose of the interventions provided. For the majority of women, this related more to the provision of medicines, where nurses are perceived to offer inadequate explanation for multiple drugs that were given. Alluding to the views of many women, Bilka stated that in most cases the information on medication was limited to statements such as '*good for your body and baby',* the information which is perceived as inadequate.

'I do not understand what all these drugs do and the nurse does not tell me, you see the nurse does not explain the benefits of injections and tablets.....all she says is that it is good for your body and baby…that is it' (Bilka 39 years).

As such, this perceived lack of explanation on the benefits of the medication may have led to non-compliance with taking medications. As some women reported the medicine as having an unpleasant taste, and may not be necessary, contributing to a hesitancy to complete the full dosage of treatment provided.

'Those tablets, many people do not take it, even me I do not take, one or two. I do not like drug anyway. Every visit I get more….it smell is strong… and taste not nice… anyway what does these many drugs do' (Jirmo 26 yrs,).

However, Naomi was quick to rationalise the perceived omissions of drug information. Instead of blaming the nurse, she believed it was her responsibility

as a user, and her failure to seek clarification. In addition, Naomi cited her lack of formal education as reason for not understanding the purpose of the medicines.

> *'I do not understand what all these drugs do and, the nurse does not tell me, I didn't ask, I should have asked isn't it, she said it is good for baby and myself. Apart from that, I do not know because am not learned' (Naomi, 29 years).*

Besides the perceived inadequacy on the information provided, for many women the usefulness of medicine was related to good nutrition, which was lacking in the community due to the effect of climate (drought) on their livelihoods (animals). Women expressed a concern about the use of many drugs and desired a change of course of treatment and nutritional support in order to gain value for the many drugs they were given. This may suggest that despite women's desire to use the interventions, the low-socio-economic status remained a concern and influencing interventions uptake.

> *'But I think these many drugs also does not help…as much. What do these drugs do alone without proper food? They should also add something like good food to help us. They should change the drug for us and offer other support like food stuff to be taken with drugs, now this drought we can't afford good food stuffs.' (Sando, 34 years).*

- **Uncertainty about HIV testing and informed consent**

For a number of women, the fear about HIV testing related to self-doubt on the possible outcome of the test, stigma associated with a positive result, the perception that HIV testing is a mandatory requirement for all pregnant women, and the lack of pre-test counselling and testing for HIV without informed consent. Women attributed these uncertainties to nurses' failure to provide an explanation about HIV testing.

'People fear testing for AIDs, they doubt themselves, but you see the nurses do not even ask you whether you want to be tested or not, she just does it, she said all pregnant woman have to be done (Shake, 21 years).

Observations at the clinics confirmed the women's concerns, where they were seen being tested without counselling. As described in the following participant observation field note.

A young first-time mother came for the first ANC visit. After obtaining medical and obstetric information, the nurse told the woman, she is testing her for HIV and AIDs and told her to stretch out her hand and she took some blood drops from her finger and after taking the blood, she told her it will take about 15 minutes to obtain the results. No pre-test counselling was offered. The woman did not ask anything (PO).

Although HIV testing is an important procedure offered during pregnancy, preparation and obtaining informed consent was crucial. Lack of the same could therefore explain why many women expressed a concern, as they reported lack of counselling prior to the testing. This may have implications on the uptake of the services because of the fear, leading to delay attendance at ANC.

Oh, what advice, no advice given, even when testing for that disease -AIDs, the nurse just prick our finger and tell us the result, thank God, I don't have it, she does not ask' (Naomi, 29 years).

However, despite the fear associated with testing and the lack of adequate information, some women indicated HIV testing was health-related, and it was important to know one's status. For instance, Kula linked the testing to perceived risk associated with the community practice of extra-marital affairs, which is culturally recognised. This suggests that the perceptions of fear of the

condition positively influenced health-seeking behaviour and ANC uptake, including HIV testing.

> *'It is good we check for this disease. You see our people culturally have extra marital affair, which is normal practice anyway...eeh!! we need to be careful (Kula, 23 years)*

The above findings on communication and information sharing, suggest a top-down and more task-oriented approach of service provision, which created an uncertainty about ANC service uptake. This means the service provided to the women was less interactive in terms of communicating with and involving the women in their own care, and less educative as well, as demonstrated in the women's narratives. This related to the limited information sharing and explanations of the interventions provided, and making women understand the purpose of the services provided, hence women remained passive recipients. Therefore, the women's accounts seemed to suggest a need for an explanation of the purpose of interventions, effective communication and involving women in their care. This was particularly important to make women understand the purpose of the interventions, which may influence subsequent ANC visits and uptake, as they made the effort to seek for the service amidst all the challenges within their context.

The following Table shows socio-demographic characteristics of women participants and the villages from where they were recruited. There were 10 pregnant women and 6 postnatal mothers, all uneducated.

Table 8: Socio-demographic characteristics and locations of participating women. (pregnant and post-natal) (n = 16)

Pseudo names	**Age**	**Level of education**	**Work**	**Marital status**	**Number of children**	**Gestation**	**Villages from where women were recruited**
Midino	18 years	Uneducated	Housewife	Married	0	9 months	1
Arbio	18 years	Uneducated	Housewife	Married	0	6 months	3
Jirmo	26 years	Uneducated	Housewife	Married	2	4 months	6

Shake	21 years	Uneducated	Housewife	Single	1	5 months	2
Naomi	23 years	Uneducated	Housewife	Married	5	7 months	2
Sarbio	30 years	Uneducated	Housewife	Married	5	6 months	5
Muliii	29 years	Uneducated	Housewife	Married	3	9 months	3
Bilachu	23 years	Uneducated	Housewife	Married	2	8 months	3
Bilka	39 years	Uneducated	Housewife	Married	5	6 months	4
Shanuti	20 years	Uneducated	Housewife	Married	1	6 months	2
Qura	38 years	Uneducated	Housewife	Married	9	Postnatal	2
Haru	23 years	Uneducated	Housewife	Married	3	Postnatal	3
Kula	23 years	Uneducated	Housewife	Married	4	Postnatal	1
Wari	31 years	Uneducated	Housewife	Married	4	Postnatal	2
Gure	26 years	Uneducated	Housewife	Married	4	Postnatal	1
Sando	34 years	Uneducated	Housewife	Married	5	Postnatal	6

4.6. **Chapter summary**

This chapter has highlighted multiple factors that women perceived to have shaped their ANC use, including pastoralist lifestyle, roles and responsibilities, and the lack of adequate information and poor communication, which emerged as a significant concern for many women. However, the perceived benefits motivated attendance at ANC. Since the findings demonstrated pastoralist women have the desire for information and services, this is critical for developing strategies to address the challenges within their context.

CHAPTER 5
SIGNIFICANT COMMUNITY STAKEHOLDERS' VIEWS ON ANC ACCESS AND USE

5.0. Introduction

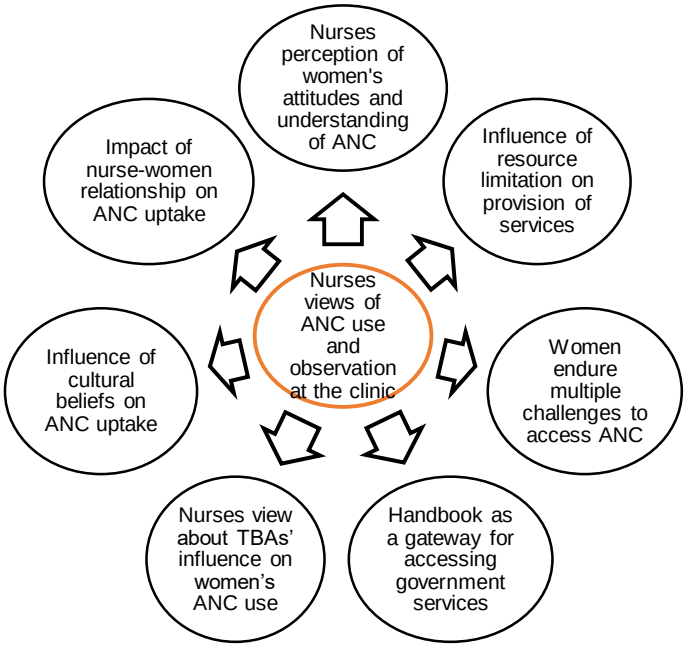
Whereas the previous chapter reported directly on women's views on their experiences of ANC, this chapter focuses on the potential influence on women from significant others in the community, specifically nurses, TBAs and men. Although these three groups are quite different, as will be seen, they share important roles in shaping women's access to and use of ANC services. Furthermore, the literature review demonstrated how these stakeholders' roles influence women's use of healthcare services (though not among pastoralist), hence organising their views together in one chapter may provide a clear picture of their perspectives. In this chapter, their views are organised and discussed in three separate sections: the first section (Section A) of the chapter addresses the findings on nurses' views of ANC use. This section also includes observational data from the clinics about women and nurses' interactions. The second section (Section B) presents TBAs' perceptions and, and the third section (Section C) describes the findings from men's FGDs.

SECTION A: NURSES' VIEWS OF ANC USE AND OBSERVATIONS AT CLINICS

5.0.A Introduction

This section presents nurses' perceptions of several interrelated factors influencing ANC access, and findings from clinic observations revealing nurses' interactions with the women during the ANC consultations. Observational data provided a picture of nurse-women relationships, showing insight to the provision of information related to the ANC, either confirming or disconfirming what was narrated in the interviews. The key themes are presented in Figure 13. The commonly reported key issues by nurses that shaped women's ANC use was the need for the perceived benefits, particularly the handbook, and the need for the confirmatory foetal status. However, although these issues facilitated the initial visit, this did not necessarily mean continuity with subsequent visits, as several factors within the community and health system shaped women subsequent use of the ANC according to many nurses. The main concern for many nurses reflected the limited resources at the health facilities.

Figure 13: Key themes from nurses' interviews



5.1.A The handbook as a gateway for accessing government services

This key theme captured the views of the majority of the nurses, suggesting women's attendance at ANC was influenced by the perceived benefits, including the need for the handbook. In addition, the increased emphasis by many nurses on the importance of the handbook as a gateway to accessing government services such as hospital delivery, encouraged women to make the effort to attend the ANC. The handbook allows women to access the benefits such as future child immunisations (all immunisations schedule included in the handbook), and a child's birth certificate (the handbook record needed to obtain birth certificate). The birth certificate as a requirement for enrolment of the child in school in future. Attendance was also linked to a need for economic gain e.g. food aid, gift packs and child welfare support, of which attendance at ANC and the handbook were the requirement. According to some nurses, failure to attend the ANC to obtain the handbook, meant women must be prepared to deal with the consequences, including the denial of postpartum services. However, many nurses reported that the threat was only meant to enhance attendance at ANC, although it had minimal impact on women's attendance at subsequent visits. The women and children were not denied the healthcare services.

The majority of the nurses reported explaining to the women the importance of the handbook by comparing the handbook to an '*identity card'*, suggesting that the handbook acted as an identifier to access ANC services.

> *'I tell them that the handbook is like their identity card, they carry it, they need it wherever they go like you don't know what will happen when they travel somewhere when pregnant, they need to carry every time.' (Gann, 33 years, Disp. 2).*

Besides affirming the above, some nurses also reported emphasising to the women the significance of the handbook as an important record for childhood immunisation, and without which it could be difficult to access services-as the handbook is needed for scheduled immunisations. The handbook has an

immunisation schedule for the child until the child is five years of age, which made women to attend ANC to obtain the document.

> *'I normally tell them that the clinic handbook is very important for them and child, all information about immunization and immunization needed until five of age is that handbook and without it the child may not be immunized and the record is kept in the handbook…guidance on flow of the schedule. But we do not deny them services...ooh no, that is how to get some of them [laughing]. Also, to get the birth information to get birth certificate later, they will make sure that they get the handbook' (*Fatu 28 years, *health centre)*

Many nurses also reported linking attendance at ANC and the handbook with the additional benefits such as food aid (e.g. porridge), maternal gift packs and support for child welfare (e.g. school fees). For example, some nurses expressed that some NGOs required proof of clinic attendance, history of hospital delivery and the child's immunisation status, in order for the family to qualify for child support programme (e.g. school fees and food aid). All this information is recorded in the handbook, hence making it a significant document for women to access services. Some nurses believed the strategy had an influence on few women's use of the ANC, as they sustained their attendance in order to gain the perceived benefits.

> '*You see even the NGOs who help them with food and school fees for their children normally ask them for the clinic handbook and if they have gone for clinic and child immunised. They know without this clinic handbook they will not be helped, NGOs like C.Y help them with school fees. You see they will be asked the child's date of birth, delivery history, weight and immunisation status.' (Gann, 33 years, Disp. 2)*

> *'There is 'maternal kit' which have items such as towel, baby wrap, pampers, and sanitary pads that we give to the mother if she attends ANC and deliver here. This is one motivating factor that encourages a few of them to come back for ANC.*

facility, some come back, but not all, but we still give them.' (Jill 43 years, Disp. 1)

In addition, maintaining regular visits at the ANC would also guarantee women access to a continuous supply of incentives such as food aid. As such some nurses believed that the need for porridge has a positive influence on attendance at the ANC among some women.

'When the porridge finishes, she knows more porridge will be given when she comes back. We extend provision of porridge even after delivery for about three months. This uji plays big role, ehh...provision of uji is one reason why they come back to the clinic.' (Nasibo, 31 years, Disp. 4)

The above statements suggest that benefits such as the porridge and maternal gift packs, was an effective strategy in encouraging attendance at the ANC clinic. However, according to many nurses the use of incentivised approaches did not automatically influence subsequent visits. Some nurses perceived the need for the handbook for its future benefits was of more concern for the women to attend ANC, than subsequent visits. This may suggest that even though the handbook was needed, and women made the effort to obtain it, other contextual factors, may have contributed to the women's inability to sustain regular visits. Also, this may suggest that although the need for the handbook and the incentives positively influenced the initial visit, women also seemed to have the power to decide when and how often they used the clinic.

'many women come only for the handbook, they know about handbook from other women…after they get that handbook they don't come back again, they want to get the handbook, because when they come for delivery they are asked for the handbook, and for immunisation they will also be asked for that handbook. They are more interested in getting the handbook and then not returning.' (Wati, 35 years, health centre)

Observations at the clinics confirmed the above views about the handbook.

> *All the women (pregnant and post-natal mothers) were seen carrying their handbook, some even protected theirs in a plastic case, which may reflect the value attached to it. The nurses were also observed documenting the interventions provided in the handbook. However, the information in the handbook was not shared with the women during the ANC consultations (PO).*

According to many nurses, attendance at ANC also provide health-related reassurance, confirming the unborn child's health status. This suggests the ANC created a sense of health empowerment, influencing ANC attendance.

> *'They know the nurse will palpate and listen to the foetal heart and inform them how the baby is. When they come, 'they say check for me baby' this is what make them to come, especial the younger mothers for the first time and just to know baby heart is felt.' (Nasibo, 31 years, Disp. 4)*

Reflecting on the above observations, the handbook with its benefits was an effective tool driving attendance at the ANC according to the nurses. Awareness of benefits of the handbook for unborn child future e.g. immunisation acted as a clear motivation for attendance.

5.2.A Nurses views about TBAs' influence on women's ANC use

Most of the nurses perceived the TBAs to have influence on the women's ANC uptake, as they believed women trust and seek their services. There is a strong perception among many nurses that women initially consult TBAs on pregnancy-related issues before attendance at the ANC. Many nurses expressed TBAs' played a critical role providing care during pregnancy and childbirth at home. Due to the nomadic lifestyle of community, and the impact this has on their access to healthcare services, TBAs become an important source of information, support, and advice. Government policy serves to

prohibit TBAs' from providing traditional pregnancy care roles. However, many nurses are supportive of their role, as they provide an important service at home and healthcare link for many women. This statement from the nurse from the dispensary serving the furthest village exemplify the critical need of TBAs in this community.

> *'The government wanted the TBAs traditional roles to be abolished, but for us because of the nomadic lifestyle of our people, it is not possible, women consult them and use their service.' (Jill 43 years, Disp. 1).*

As such many nurses believe that women frequent use of TBAs is due to their understanding nature, their familiarity with their care, the sense of comfort they bring, and the range of services they provided. This included procedures such as antenatal abdominal massage, which is believed to have health-related benefits. Some nurses also referred to TBAs as '*advisors*' and a link between the community and healthcare services. As a result, some nurses believed such a relationship influences some women health-seeking behaviours.

> *'They are used to them, closer to them and they are comfortable with them than us. They are advisors. These TBAs are the very first people these women go to before they come to us, they send women to clinic also.' (Gann 33 years, Disp. 2).*

> *'TBAs check baby, provide abdominal massage and women go to them before coming here, some believe that if TBAs will not do that massage the legs will be numbed and they will not be able to walk. (Fatu 28 years, health centre).*

The above nurses' assertion about TBAs' roles in the community was observed during the field visit as indicated in the following field note extract:

> *It was during one of my field visit, while I was heading to village one for interviews, I encountered with a young mother by the roadside, accompanied by a TBA and a female relative. The young woman just had a baby on the way to the nearest*

health facility. I was morally obliged to assist them to the dispensary (PO).

These important roles of TBAs to link women to ANC services has been enhanced by the incentives they receive, such as cash vouchers, and access to training programmes on maternal.

'In every village we have TBAs that help to identify the pregnant women and send them to the clinic and many of them do that. When they bring or refer a pregnant woman to the clinic and bring a mother to the hospital to deliver, they are given some incentives (small money), training offered on importance of hospital delivery.' (Jill 43 years, Disp. 1)

By contrast, Robbi felt that some TBAs do not encourage ANC attendance due to the fear of a loss of livelihood, namely the loss of rewards/incentives given by the women's family as an expression of gratitude for the home delivery. Although this is not a universal view, this may have an implication on women's use of ANC, as TBAs are expected to be referral agents, as will be discussed later.

'*TBAs here no, they do not support clinic attendance because they see that they will be rendered jobless. For them if the pregnant woman go to clinic, they fear she will end up delivering in the health facility, which will be a loss to them, they want them to stay home and be delivered at home to get their share.' (Robbi 51 years, Disp. 5)*

Discussion with some nurses further indicated that some older people (TBAs included) sometimes questioned the purpose of the ANC visits, as they compared the past and present pregnancy care practices. According to a few nurses, this reflects the older men and women's perception that pregnancy is a period of normal health, that warrants little need for ANC visits. In addition, affirming the women's views, as reported in chapter five, some nurses also perceived that contrary to older people's views, younger men and women have a more positive attitude towards contemporary healthcare, encouraging ANC

attendance. Such positive attitudes among some younger men that ANC is necessary may hold some promise for pastoralist women to integrate into contemporary healthcare service use (e.g. ANC clinic).

> *'They [older men and women] tend to question a lot on the purpose of the clinic, they say that even in the past there was nothing like clinic and their women were ok with pregnancy, but for some younger generation those in their thirties [men]…they are gradually accepting and value ANC.' (Fatu 28 years, health centre)*

5.3.A Women endure multiple challenges to access ANC

In this theme nurses' views demonstrate that although women faced multiple interrelated challenges, they strived to attend ANC clinic even if only once. These challenges included, the distance to the closest health facility, gender related roles and responsibility burdens, limited decision-making power to access healthcare, poor socio-economic status, the pastoralist lifestyle, and a lack of transport. Nurses affirmed that the migratory nature of the pastoralist community, in search of pasture and water, delayed women attendance at the ANC clinic. Despite these mitigating circumstances, nurses described how many women would make every effort to attend, even if only in their last trimester.

> *'If they come in third trimester, they cannot complete that fourth visit, which is why we have high number of fourth visit than first visit. The reason they give is they move places, this pastoralist move frequently for pasture and water at least to they come (Nasibo, 31 years, Disp 4)*

In addition, almost all the nurses expressed that although public transport was scarce, unreliable, and unsuitable, women would attempt to find any available means of transport to attend the ANC clinic. The experience of women making the long journey on foot to the nearest dispensary was cited by several nurses

as a key factor inhibiting their attendance at the clinic for their first and subsequent visits. This conversation affirmed the struggles with transport to access the ANC clinic.

> *'A mother with twin pregnancy and at term, no means of transport and the few means of transport is a truck which is not comfortable, walking for clinic all the way, she struggles.' (Fatu, 28 years, health centre).*

> *'The other reasons why some would not attend ANC second time is the distance, and again we refer them all the way to the main hospital for blood test which most of them would not afford to go.' (Robbi 51 years, Disp. 5)*

Evidence from the field visits confirmed nurses' assertions about women's encounters to access ANC services. It was noted that the temperature in the study area could rise above 40°C. Women were observed collecting and carrying heavy loads of firewood on their back from, far in the bush. Others were seen preparing to travel to the dispensary on foot, only equipped with a small water bottle, which they indicated would not last them long, and by the time they arrive at the dispensary, they would be exhausted and very thirsty. This affirmed that despite such unfavourable conditions of their environment, pastoralist women demonstrated immense resilience and positive attitudes in their struggle to access ANC services.

In view of this, some nurses reported feeling the need to provide for the women as much as possible in addition to confirming the baby's status, and giving the handbook, before their long journey back to their village.

> *'I tell them everything because you might find them today and they might never come back again. Some mothers from this area leave home very early [before sun rise] and reach here at 10 or 11 am, exhausted. Also, some mothers from this area after the first ANC check and when they are told the baby is ok and they obtain maternal and child health handbook, most of them will not come back…distance.' (Jill, 43 years, Disp. 1)*

The discussion with the nurses further revealed that gender related roles and responsibilities, coupled with limited support could barely allow women the opportunity to sustain regular visits. These roles as indicated in the quotes below became a barrier for many pastoralist women attendances at ANC.

> *'Mothers are busy with household work, some harvest fodders, some go to fetch water from far wells, then they do not make it, I don't know where men are...some husbands not there, some follow animals' (Wati 35 years, health centre).*

In addition, many nurses reported that men's practical support with household chores or accompanying women to clinic was lacking, due to their pastoralist community lifestyle of migration with animals, and their cultural beliefs about gender roles that pregnancy care is a women's role.

> *'It is rare to see them coming with partner, men involvement is low. It is cultural issues, whereby they see that as women responsibility, that is the main reason, they do not come with their wives, I have not seen any. They always say he is away or busy, men are more with their animals than supporting them.' (Gann 33 years, Disp. 2)*

Despite men offering limited practical support to their wives, due to their preoccupation with their roles of managing their animals, some nurses reported that husbands made the decision regarding women's attendance at the ANC.

> *'Women do not come if they are not told by their husbands to go, they have to get man's permission to go for the clinic, men in this community have big say in women's use of health facility. But men are more worried about grazing, pasture for their animals than coming to clinic with their wives.' (Chiro 29 years, Disp 2)*

Drawing from the above findings from nurses, women's main reason for attending the ANC clinic was to confirm their pregnancy, confirm their foetal status, collect the handbook and gain the perceived benefits. These factors

made them to endure multiple challenges to attend the ANC clinic, suggesting resilience and a positive attitude towards ANC.

5.4.A The influence of resource limitation on the provision of ANC services

All of the nurses expressed difficulties in providing services to the women due to a lack of resources at the dispensaries, which influenced ANC uptake among many of the women. This included a lack of resources (e.g. equipment for blood tests, medicines, proper storage space for the drugs and shortage of staff), lack of mobile outreach services, the cost of the interventions for the women, and a lack of privacy impact on ANC uptake. During observations at the clinics, it was noted that women regularly raised concerns about the direct cost of services, such as blood tests when referred to another health facility. Nurses found this stressful for themselves, and inconvenient for the women. According to many nurses, women's inability to pay for the cost of healthcare referrals, negatively influenced decision to return for subsequent visits. Limited space at the dispensary meant that the women's privacy was affected. This was particularly embarrassing for multiparous women sitting with younger women in the waiting bay. During clinic observations, curtains/dividers separating the nurses' desk and examination bed were not drawn sometimes during physical examinations, and other people (CHW) in the room could see a woman's abdomen when she was being palpated. Additionally, case histories of pregnant women were often undertaken with the examination door left open, visible and in earshot of other clients waiting along the corridor, including a cleaner and CHW in the room. Women were also observed complaining about the metal benches in the waiting area being uncomfortable. Although there were range of resource limitations that impact on the provision of services, nurses felt that women were more concerned with the limitations relating to equipment for blood testing.

Almost all nurses expressed feelings of frustration at their limited powers to deliver the necessary services to the women who had made the effort to travel

long journey to the dispensary, strongly suggesting a need for the government to provide more resources.

> '*lack of personnel, equipment and that leads to some pregnant mothers not returning. Government need to provide for laboratory services, so we do not send them all the way to another hospital, yet many of these mothers could not even afford that transport fare. this community is poor.' Some do not go.' (Jill 43 years)*

> *'Imagine you provide care no resources, we struggle, sometimes we lose mothers because of this, no ambulance, no drugs, no fridge to keep vaccines, they have to go to get tetanus toxoids (TT) elsewhere.' (Robbi 51 years, Disp. 5)*

Although limitation of resources was beyond their control, many nurses felt it placed them in a difficult situation. Women questioned he purpose of visiting the dispensary when resources for their pregnancy care, particularly equipment for blood tests, were lacking. Nurse felt that the women did not fully understand the purpose of ANC visits.

> *'We send antenatal mothers to main hospital for ANC profile because we do not have the laboratory services here, it is not my fault, but they always ask me, '…why should I come to this clinic, when you do not have things for blood test, they think that is all they come for?' (Nasibo 31 years, Disp. 4).*

The limited space at the dispensary was a concern for young, but particularly the older women due to the fear of mockery or embarrassment for being pregnant at an older age. For example, one nurse reported that an older woman felt ashamed sitting next to the younger women, desiring an alternative route to access the clinic in order to conceal her pregnancy. Although not universal, this finding suggested that pregnancy at an advanced age acted as a barrier to ANC services uptake.

> *'Those married young are shy, but for multiparous they real feel embarrassed to be seen with young mothers, for they feel*

being viewed negative for giving birth in older age. She hides her pregnancy and when she comes here for clinic she enters through the back door, not where the other pregnant women are seated' (Fatu 28 years, health centre)

Similarly, some nurses felt that the provision of the maternal kit (gift packs) motivated women to visit the ANC clinic, and a lack of these incentives negatively influenced their attendance. As a result, many women would tell others.

'This maternal kit encourages them to come to clinic, but the challenge it is mostly out of stock and some mothers won't come back if they knew that, they also tell other pregnant women, which will then discourage some.' (Jill 43 years, Disp. 1).

5.5.A Nurses' perception of women's attitude and understanding of ANC

In this theme, the nurses' views demonstrate that women's ANC attendance was shaped by two key issues: (i) women's understanding of the purpose of ANC, and (ii) women's attitudes to ANC use. Some nurses' believed that women lacked knowledge of the purpose of ANC, and only sought care when experiencing illness. As they were not familiar with attending the ANC clinics, hence did not understand the need for it. The community attitudes about pregnancy as a 'normal healthy state' that does not warrant medical attention further contributed to the limited need for attendance at ANC. Many nurses believed a woman's lack of knowledge reflected her low literacy level, which was reported at 98% (lack of formal education). Demographic data confirmed that all the women in this study were uneducated and illiterate. Almost all of the nurses reported providing pregnancy related information to the women. However, this assertion did not reflect what was observed during clinic observations and as also narrated by women in section 4.5.2.

According to many nurses, a woman's knowledge and understanding of the purpose of ANC, shaped her decision to use ANC, with many women attending, mostly in last trimester. Some nurses linked women's attendance to pregnancy-related medical problems. When describing women's understanding of the service, and the poor uptake and acceptance of healthcare in the community, nurses used phrases such as '*it has* not sunk well', and '*a lack of knowledge or ignorance*'. Many nurses believed this lack of awareness and understanding was a significant challenge in the community, impacting women's attitudes to ANC use.

> *'Here, women do not come for ANC clinic. If they do, it is towards end of pregnancy, only with complications. With ANC they are yet to fully understand the importance…some will tell me, 'I have four children all delivered at home and didn't go to clinic.' Sometimes I feel it is not only the distance but lack of knowledge. They do not take the clinic seriously; it is like it has not sunk well…knowledge is one thing that will change this community's attitude to maternity care.' (Jill 43 years, Disp. 1)*

> *'I think it is ignorance...this community still perceive that clinic should not be started early.' (Wati 35 years, Disp. 3)*

The above finding suggests that in the context where the community does not understand the value for ANC use, women's use of ANC services was perceived to be limited, thus reflective of community influence on the use of the services.

As such, some nurses appeared to link the lack of formal education to the reason why women do not appreciate the importance of ANC, and their delay in early engagement with health facility, unless identified incidentally by the nurses when they seek medical care for other ailments. This therefore impact on achieving the required number of ANC visits, and utilisation of ANC services.

> *'But most importantly this people were not brought up to knowing culture of going to hospital or clinic. 98% of the*

women here are not educated, so they do not see the goodness of the clinic. Attendance of ANC here is not something that they can do voluntarily. It's very hard to find a mother coming for first trimester to clinic, unless you identify them when they come due to other sicknesses, their understanding is low' (Robbi 51 years, Disp. 5)

In addition, some nurses expressed concern about some women's poor recognition for, and use of ANC, apart from during sickness, due to perception that pregnancy does not require access to ANC. They also added that sometimes distance was not the only factor that influenced attendance, and use of ANC services, as some women who lived close to the health facility choose to either delay attendance or fail to attend all together.

'There are those who are from near here and they do not come or come very late. They belief that if they are not sick, there is no need to go to the health facility in pregnancy.' (Fatu 28 years, health centre).

Relating to above, a few nurses also perceived that mistrust for unknown changes, sense of security in known practices-that is traditional pregnancy care and coupled with lack of understanding as affecting attendance at ANC. Using strong phrases such as '*glued to their traditional practices'*, one nurse expressed her perceptions of women's attitude to health practices. Lack of recognition of contemporary care may have implication on women's attendance at ANC.

'It is as if we change what they know, their ways of practice and they do not want changes, they don't trust. There are some still glued to their traditional practices; they do not understand the purpose of maternal health services. They do come when they want.' (Gann, 33 years, Disp. 2)

Recalling women's attitudes to contemporary care, one nurse narrated the difficulty of getting a woman to use pregnancy-related care due to the beliefs that interventions led to adverse pregnancy outcome. This suggested that

although a lack of understanding was a significant issue impacting women's attitudes, there could also be other underlying factors related to women's beliefs as explain in Section A, 5.7

> *'A mother was clinically pale with signs of anaemia. I told her go to the main hospital to check her Hb, but she was not bothered...stating she would be treated with traditional medicine at home...she ended up with retained placenta and bleeding with very low Hb, it was emergency transfer, and she was transfused 2 pints. We almost lost her.' (Chiro 29 years, Disp. 2).*

A few nurses linked this limited understanding to a refusal to accept medical interventions. For example, nurses reported, women perceived blood transfusion causes ill-health to unborn baby and the mother. As such, even in situations where a nurse advised on the importance of an intervention, some women failed to use the intervention, instead, they sought traditional pregnancy-related remedies. Such practice may have implication for ANC uptake, hence the need for a strategy to mitigate.

> *'Many of them do not like blood transfusions... We explain to them that…they should try to take the tablets until delivery to improve it. I had one case where the Hb, I referred her to the main hospital for blood transfusion. She refused preferring traditional treatment... they fear the contracting diseases from transfusion …it harms mother and baby. They also do not like their blood taken, and you see for ANC, we need to take some blood.' (Gann 33 years, Disp. 2)*

Women's ANC use was also influenced by prior negative experiences. This related to situations where services were not provided during their visits, or a service was delivered inadequately and inconsistently. This was further compounded by referrals to other health facility due to the lack of resources at the dispensary. With such experiences, some nurses perceived that some women develop negative attitudes towards the services provided, influencing their subsequent visits.

> ‘*they used to get one outreach visit after long time, which was not consistent, and even that only cater for children immunisation…such experience where the services are not provided make them not to come. Even here, they do not come, many times because we send them to main hospital because of lack of resource. Now they have known that and formed an attitude…they tell each other, they delay coming.’* (Robbi 51 years, Disp. 5)

For multiparous women, their previous experience where they gained little from the visit, directly affected future attendance and attitudes toward ANC according to some nurses. In addition, the difficulty of getting multiparous women to attend was linked to their self-awareness of ‘*knowing their pregnancy if it has any problem’*, hence little need for ANC visits. As such their attendance was mainly linked with need for the handbook.

> *‘Some multiparous, do not start the clinic until very late, almost at 8 or 9 months, all they want is the ANC handbook. they believe that with many pregnancy experience and many children they could understand if their pregnancy have any problem to warrant them go for the ANC many time, so they think coming here for clinic regularly have no impact on them, they believe they already know about clinic.’ (Nasibo 31years, Disp.4)*

When asked about provision of health education during ANC consultation, almost all the nurses indicated providing pregnancy-related information to the women, including information on content in the handbook.

> *‘We provide all this information in maternal and child health handbook, health education and test for diseases. We also do nutritional counselling during first visit, give medication and measure blood pressure to rule out preeclampsia, all that in ANC, we do everything for them.’ (Jill 43 years.’ Disp. 1).*

However, observations at the dispensaries disconfirmed nurse's assertions on the provision of information to the women. Interventions which were regularly undertaken without an explanation, included abdominal palpation (foetal heart auscultation), blood pressure monitoring, checking weight and testing for HIV during the first visit. The handbook was used for recording these interventions, but the information in the handbook which provided a supportive explanation of this procedures and much more information on care during pregnancy was not utilised. The health education in most cases was problem-based, for example, when a woman's weight was found to be low, the nurse provided nutritional supplements (e.g. porridge) and information on food choices as indicated in the following observation note.

> *'A pregnant woman who was para 7+0 at 8 months was seen. After weighing the nurse told the woman that her weight was low and that she will be given porridge. She told the woman to eat well, lots of maize with beans, vegetables, and all 'good food'. She told her the baby is ok, but she needs to eat well to increase her weight.' (PO).*

Observations at the clinics further revealed there were pictures, flipcharts, and booklets with pregnancy-related information on the nurses' desk and mounted on the walls; but they were not utilised during consultations. Failure to provide the information might explain why women lacked understanding of the full purpose of ANC and were reluctant on uptake of the interventions as earlier reported in the women's data. See Appendix 12, for some of these materials on pregnancy related information.

5.6.A Impact of nurse-women relationship on ANC uptake

This theme illustrates nurses' perceptions of how their relationship with the women influence ANC access and uptake of the interventions. This included (i) how the nurses relate with the women during first visit, and (ii) how the nurses showed trust with personal medical information. Almost all the nurses shared the belief that initial visit had a significant impact on women's

subsequent use of ANC services. Establishing a relationship and good rapport during the initial visit was reported by some nurses as an important ingredient for subsequent visits. In addition, some nurses expressed concerns about women's limited trust in nurses, favouring the TBAs. Due to a perception that some nurses disclosed confidential information, some women withheld crucial medical information from them, impacting negatively on the service provision. In view of this, some nurses felt that it was important to establish a rapport, develop trust, and help the women to understand the purpose of the ANC visits.

> *'Interaction with the mother and the way we approach her, she will start opening up to us for talk., if you did not handle her well during the first visit she will not come back, but if you treat her well she might come back, yes it is important we treat them well.' (Nasibo, 31 years, Disp. 4)*

This finding concurred with the earlier findings, where Robbi gave detailed reasons why women do not use the ANC. Here Robbi cited the provision of an appropriate and non-judgmental approach as contributing to women's subsequent use of ANC.

> *'Talking to them nicely, make them understand why they need to come back, I think it is not that they don't want to come to clinic but...they do not get…understand, they can't see why they come back.' (Robbi, 51 years, Disp. 5)*

As such, a few nurses perceived that sensitivity to women's cultural beliefs, in relation to protecting their personal information is critical to their acceptance and uptake of the service. For instance, asking a woman about her family composition, and the number of children is considered culturally sensitive, and might influence interaction and uptake of the services.

> *'How we handle these women…we need to be careful, Sometime you ask questions, to me it is important questions, but they do not like it, asking them how many children they have, spacing childbirth, they don't like such*

questions…counting how many children they have in this culture, they see it as bad.' (Gann 33 years, Disp. 2)

All of the nurses reported that HIV testing was a requirement and needed to be performed at the initial visit for all pregnant women, and the women may have little choice about the test. As such some nurses linked women's delays of attendance at ANC to a fear of the HIV test results.

'You see testing for HIV and AIDS is requirement for all the pregnant women when they start ANC clinic, some delay coming for fear of being tested…that is what they say.' (Fatu, 28 years, health centre)

During observations of pregnant women's initial ANC clinic visit, it was noted that HIV testing was performed by informing the women what was to take place, however there was limited opportunity for them to give their consent or receive counselling. All that was observed was the women being informed about the procedure.

Additionally, nurses reported that some women were reluctant to disclose their personal information due to a mistrust of the nurses to hold their confidence. This finding confirmed women's accounts about the HIV testing process described in the previous chapter.

'Some also do not tell us if they have other medical condition or even urinary tract infections, HIV, they fear telling us. I do not know why, maybe they fear we tell others about their condition.' (Chiro, 29yrs, Disp.2)

Affirming the above statement, two nurses (non-local[3]) reported that mistrust with personal medical information was linked to the perception that local nurses[4] do not keep confidentiality regarding personal information, unlike non-local nurses. Hence, these two nurses believed women trusted them with their personal information. This finding may have implication for provision of services, as many of the nurses in this context were local nurses. However,

[3] Not from the same ethnic background as the women; not a native of the area
[4] Nurses from the same ethnic background as the women and native of the area

this did not necessarily mean women have no trust for all local nurses, as this was not a universal account.

> *'Actually, they are happy that I am not from this community, because they say that nurses from other community keep secret than the locals, like when testing for disease (HIV), they fear local nurses go and talk to other people about them.' (Robbi, 51 years, Disp. 5)*

Jill, a nurse, shared of her experience where a woman who was fearful of disclosing information, but would instead discuss the situation with the TBA.

> *'some women when they have some vaginal discharge (infections), they tell TBAs, they trust them. They don't tell us, then TBAs will quietly tell us and we tactfully approach the pregnant mother and find out the problem and give her the treatment.' (Jill, 43 years, Disp. 1)*

The above findings seem to suggest a need for improved communication, establishing trust and rapport between the nurses and women to enhance ANC uptake.

5.7.A Influence of cultural beliefs on ANC uptake

In this theme, nurses perceived that cultural beliefs and practices shaped women health-seeking behaviours during pregnancy and childbirth. These included practices related to childbirth, pregnancy disclosure, community attitude about out of wedlock pregnancy, perceived risk of use of medicine to the unborn child and culture associated with food practices. When talking about intervention uptake, few nurses reported that some women may attend clinic but are hesitant to use certain interventions due to a belief that it might cause foetal deformity and ill-health to the mother. Although cultural beliefs were linked to non-disclosure of pregnancy in the early stages, nurses did not offer a clear explanation about this aspect of the culture, and they merely

stated as their 'culture', which they believed women were expected to follow, contributing to delay early ANC visit. Other issues nurses reported, which contribute to delayed pregnancy disclosure, included fear, shyness, and a lack of knowledge among first-time mothers as linked to traditional practices of early marriage. Nurses also linked community beliefs to early non-disclosure of pregnancy, meaning attendance at ANC will be delayed.

> *'Here it's their traditional to be married early, those ones hide pregnancy, they are shy, the problem, not to show off pregnancy early, I do not understand, this culture.' (Gann, 33 years, Disp. 2)*

> *'There is also perception from the community (older men and women) that the pregnancy should not be disclosed early.' (Wati, 35 years, health centre)*

According to many nurses, cultural beliefs seem to have more impact on women with out of wedlock pregnancy regarding pregnancy disclosure resulting in poor uptake of ANC services. This was related to the fear of public appearance, social reaction, isolation, and stigma when they disclose the pregnancy. However, during childbirth they seek support from the health facility as TBAs also do not provided pregnancy related support in the community.

> *'For those who get pregnant before marriage...oh…this, culture…they do not accept. Community do not want to hear of it. it is unwanted. They hide pregnancy and do not come for clinic, they are not many… hide pregnancy or attend very late at term or some only seen in labour, TBAs do not assist them.' (Jill, 43 years, Disp. 1)*

One nurse added that the problem of social rejection as experienced by women with out of wedlock pregnancy was also demonstrated in how they were alienated by married women during ANC clinic visits, where married women kept their distance at the clinic. Although this was the perception of

one nurse, it gave insight to the difficult faced by women with out of wedlock pregnancy during pregnancy and ANC experience.

> *'Even here when she comes for ANC clinic and sit next to other women (married) on the same bench, those women move away from her and she is left alone on the bench.' (Nasibo 31 years, Disp4).*

Cultural beliefs and practices also influenced some women acceptability of locally available and affordable food items, particularly in situations where health advice was required. For instance, some nurses reported about local beliefs that certain foods were meant for the animals, while some were culturally forbidden, hence impacting on ANC advice provided and uptake. However, these beliefs were not specific to pregnant women only, but rather the community in general on food practices. Some nurses reported finding it difficult to convince some women to accept certain health information related to pregnancy care. Despite the nurses' trying to manage the scarce resources, such beliefs impacted on the uptake on pregnancy-related information provided during ANC visits.

> *'A mother who is anaemic and I advise her on protein and food high in iron, such as sukuma wiki (green vegetable), or eggs, they always say 'God forbid', they cannot eat because culturally they do not eat birds product (eggs) or grass (sukuma wiki) which is for their animals, yet this product is a bit cheaper and this is one big challenge we face.' (Wati, 35 years, health centre)*

> *'Like now when it has rained and there is some natural green vegetable that are consumable. I tell them to take this chance to take this vegetable because they are free and readily available, they said, that is their animal's food, and in their culture, they don't eat (Chiro, 29years, Disp 2)*

In addition, getting some women to use medical interventions was reported as difficult by a few nurses due to beliefs about medical interventions. These

beliefs included fears held by some women about the effects of medicine on the unborn baby – that it might cause foetal deformity and ill-health to the mother. However, despite much ambivalence, nurses did not suggest that women refused treatment all together, but there was hesitancy due to the fear of the effect it might have on the mother and baby. Nurses further indicated the existence of the traditional medicine that influenced ANC uptake, as some women sought traditional approaches for pregnancy-related problems.

> *'But for this pastoralist it is hard to convince them to take the drugs, some will tell me 'pregnant women should not take drug, it affects the baby, cause deformity. Also, if they get miscarriage or problem with conception or in pregnancy they go to traditional herbal women. They also fear injections like Tetanus Toxoids (TT), they say injection is bad, they associate it with certain conditions 'wan tufan' and they believe that injection will make it worse. Generally, they do not like medicine, they seek traditional remedy from specific sub-clan.' (Chiro,29 years, Disp2).*

The following Table shows the demographic characteristics of nurses' participants in the current study. The work experiences of the nurses in current location ranges 1-3 years, and with exception of one nurse all the nurses in current study have diploma level of education.

Table 9: Socio-demographic characteristics and locations of participating nurses(n = 7)

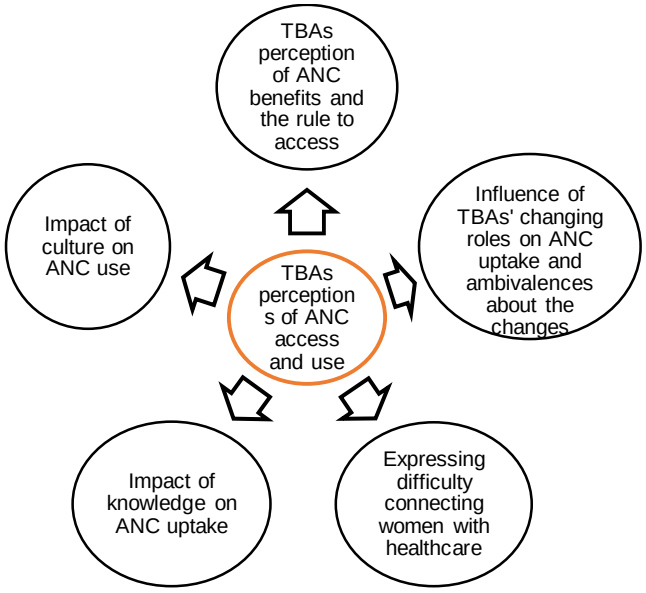
Pseudo name	**Age**	**Level of education**	**Years worked in current dispensary**	**Place of work**	**Villages where they serve**
Jill	43 years	Diploma	3 years	Dispensary 1	1
Gann	33 years	Diploma	1 year	Dispensary 2	2
Wati	35 years	Diploma	2 years	Health centre	3
Chiro	29 years	Degree	3 years	Dispensary 2	2
Fatu	28 years	Diploma	1 year	Dispensary 3	3
Nasibo	31 years	Diploma	1 year	Dispensary 4	5
Robbi	51 years	Diploma	3 years	Dispensary 5	6

SECTION B: TRADITIONAL BIRTH ATTENDANTS' PERCEPTIONS OF ANC ACCESS AND USE

5.0.B Introduction

All TBAs reported that ANC clinic use was strongly shaped by multiple factors within the pastoralist community context as demonstrated in Figure 14. However, the key issues commonly focused on by the majority of TBAs are their new roles as referral agents, various stakeholders' expectations of their roles, and the difficulties encountered while performing the expected roles. The ambivalences surrounding their inability to practice their traditional pregnancy care roles, and the perceived benefits of some traditional practices (e.g. antenatal abdominal massage) were concerns frequently raised by the TBAs. Most TBAs admitted that government expected them to be referral agents, however, despite their willingness to link women with healthcare, multiple challenges at community and health system diminished their power. Women attendance at ANC was also linked with the perceived benefits and the rule issued by the nurses, where attendance at ANC, obtaining the handbook, sustenance of the visits and hospital delivery were prerequisite to accessing the benefits and postpartum services. Almost all TBAs perceived these issues influence women ANC use.

Figure 14: Key themes on TBAs views of women ANC use



5.1.B TBAs' perception of ANC benefits and the rule to access

In this theme, attendance at ANC was linked to a range of perceived benefits, and rule for accessing these benefits. These include the benefits associated with the handbook, need to monitor pregnancy, to receive nutritional support, for HIV testing and to gain new knowledge on the importance of ANC clinic and delivery in a health facility. Of these, the handbook and its associated benefits, acted as key motivators for attendance at the ANC. Attendance was also linked with the imposed rule, which state that for women to access the benefits attendance at the ANC and delivery at healthcare services is required. Although most of the TBAs admitted absence of ANC clinics during their generation, and that pregnancy care and childbirth was related to their intuitive beliefs about God's protection, most TBAs expressed the relative merits for ANC visits, and the reason for which they provided the referral roles. These views were mostly from those TBAs who had been trained by NGOs, unlike some who expressed limited understanding of ANC benefits. However, many TBAs were uncertain about whether this information was shared with the women during ANC visits, since their narratives were based on knowledge gained from the training.

> *'This clinic of pregnant woman was not there before, even I have never been checked, but now with the changes that is there, young women gain from check-up for the baby and herself. In training we were told clinic is good to check pregnancy progress, check diseases-this bad one… 'AIDs'. they learn about importance of hospital delivery. So, for all these and we send our girls to this clinic. I think they are taught all these; I don't know.' (TBAs FGD1, P3)*

As mentioned previously, many TBAs agreed that the handbook is an important document, on what they perceived as for the 'f*uture*' of the unborn child. This is related to the perception that the handbook is needed to obtain a notification for a birth certificate, which is a needed for enrolling the child in school.

'Everybody know these days the handbook is very important. They say it has child information, if you do not have the handbook...how will they get, certificate. Women go there to get, mine did not have. Children these days to go to school they need it I do not know that is what the nurse said.' (TBAs, FGD4, P4).

A need for ANC visit was also linked with women's low socioeconomic status. According to some TBAs, this was related to persistent droughts that affected their community livelihood (e.g. livestock dying), and some women were unable to meet their nutritional needs during pregnancy. As such, attendance at ANC and provision of medications and porridge was perceived by some TBAs as influencing ANC services uptake.

'Also, you see people are generally poor, many women do not have good food to eat during pregnancy. If they go for this clinic, they are given porridge and drug to help them. We depend on animals, which are weak and dying because of drought.' (TBAs, FGD1, P1).

Some of the TBAs further associated attendance at ANC to locally imposed rule by nurses. This rule influences women to use ANC services. According to some TBAs, the rule requires women to have attended ANC, obtain the handbook, sustain attendance at ANC and delivered in hospital in order to access the benefits and postpartum services e.g. gift packs, food aid and immunisation. Hence, the need for benefits and fear of denial of the same drives women to attend ANC clinic.

'If a woman has not gone for clinic during pregnancy, or without the handbook…delivered at home, the nurse will threaten to refuse gifts, immunisation…they fear. (TBAs, FGD2, P5)

As such, negotiation by village elders might be required to access the services according to some TBAs. However, all the TBAs were quick at expressing that the child would be immunised but with a warning of consequences should the woman fail to attend ANC clinic in future. Some TBAs believed the strategy

was meant to enhance attendance at ANC and has yielded some benefits as some women attended ANC clinic for fear of consequences, and to ensure that they obtained the handbook, and some also delivered in hospital. This demonstrates that even though the rule appeared coercive and may have failed to consider other underlying contextual challenges as explained in section; 4.4, it influenced attendance at ANC positively.

> *So, the village elders might intervene, the woman is warned not to fail to come for the clinic next time. This rule is a means to make them to go for clinic, some do not attend. The woman will be asked a lot of questions about, why she didn't attend clinic, strong warning will be given not to repeat. Yes the child will be immunized…..no they do not deny us services, this is to make them attend clinic and deliver at hospital,.' (TBAs FGD4, P3).*

Besides being a strategy that drives women to use ANC clinic, some TBAs also added that the above rule was meant to create peer influence for other women who did not attend clinic, as earlier reported.

> *'You see the idea is to make them attend clinic [laughing] when she come home after that she tell other women that she was in trouble for not going to the clinic, others will go to in future, next time she will attend.' (TBAs FGD2, P2).*

5.2.B Influence of TBAs' changing role on ANC uptake and ambivalence about the changes

A key issue that has emerged is TBAs' perception that their roles are changing from traditional pregnancy care practices to being referral agents and how this had influenced women's ANC access and their own practices. The changes are linked to the training provided by NGOs and government on the importance of maternal healthcare services. Consequently, the majority of TBAs perceived contemporary care as a safer option due to the multiple perceived benefits to

the women. This included opportunity for the women to check their health and that of their unborn babies, to learn the importance of hospital delivery, to receive medicine that would improve blood level, and to test for diseases, in particular AIDs. The referral roles were mainly attributed to increased awareness, perceived fear of risk of contracting diseases (e.g. AIDs), need to follow directives from government and to gain the incentives. For these reasons, many TBAs reported discouraging childbirth at home, identifying, referring, and reporting those who refuse to attend the ANC clinic. However, there were ambivalences among some TBAs about changing roles due to their many years of experience in traditional pregnancy care (e.g. over 35 years in one case), which was still valued and practiced. Nonetheless, the majority believed that the knowledge gained from the training had encouraged them to act as referral agents, and changed their ways of practicing pregnancy care, hence referring women to healthcare.

> *'I have been doing the work of looking after women at home for the last, 30 years. Now they (NGOs, government) told us about this clinic to send women to hospital when in labour, to clinics… the pregnant one. Now our work is changing [laughing]. They tell us… we look for them in village, tell the nurse those who refuse to go, bring them to give birth in hospital, you see now, our work. I do that because they are the government.' (TBAs FGD3, P1)*

In this regard, many TBAs reported incentives are provided in the form of cash voucher to support their referral. However, although they appreciate the incentives, some believed it did not influence their roles, since they would still refer women with or without incentives, as they felt morally obliged. As explained in the next quote.

> *'Also, we were given small cards with some numbers. I identified and refer women…mostly to give birth in hospital. I give her that card and she give it to the nurse, and I will be given some small money for referring. The small thing (money) they use to give us not there for long time…, we will*

do it when we can because we are helping our daughters.' (TBAs FGD1, P3)

In this instance, the use of incentives could be a strategy by the government to enhance the referral roles of TBAs since TBAs are best placed due to their position in the community. Hence, government have found it necessary to use them as referral agents to identify and link women with healthcare, as they are required to report those refusing to attend to the nurses. Reporting clinic defaulters may suggest the TBAs have a surveillance role and a way of getting women to use ANC services. Thus, many TBAs reported identifying and referring women to ANC clinic as expected by the government, enabling utilisation of ANC services. However, some TBAs mentioned that the emphasis is mostly directed at referral for skilled birth attendance.

'You see they talk a lot about not to deliver women at home, to refer to hospital. We know our pregnant girls… hospital want us to tell them to go for clinic, if they refuse tell their husbands and if their husband is not taking any action, tell the nurse at the clinic, the ones I refer… they go.' (TBAs FGD2, P3)

Another emerging issue is that TBAs reported using their position to influence women to seek healthcare. They related this to the knowledge they gained from the training, as mentioned earlier on risk of HIV. Some TBAs linked attendance at ANC with health benefit-that is the need for HIV testing. Most of the TBAs perceived that 'AIDS' is a threat in the current generation, thus they (TBAs) made it a precondition that unless women attend ANC for the test, they (TBAs) may not offer services such as childbirth at home. Hence, such conditions acted as an influence for women to attend ANC clinic according to some TBAs. This suggests that TBAs are exercising their power in influencing women to use services, thus contributing to a change in health-seeking among pastoralist women.

'I tell them if you don't go to the clinic then I will not deliver their babies [yes, yes they say in chorus], may be you are sick,

you see they also check them for disease, these days there are ones like AIDs… bad one, some would listen and go.' (TBAs FGD 3, P3)

Reflecting on the changing roles, some TBAs questioned whether it was prudent for the government to recognise and reward their effort. In this instance, they perceived recognition might motivate them more to continue with their referral role.

'Do you think the government should reward us for the work that we are doing, at least give us small money occasionally [laughing], that will also help us…keep going, continue with this work.' (TBAs FGD1, P4)

However, despite their new role to refer women to ANC services, there was also ambivalence regarding changing roles, as some TBAs expressed concern about not practicing some of their traditional roles. Of concern for many TBAs is antenatal abdominal massage (AAM) during pregnancy, which is perceived as beneficial to the women and unborn child. In addition, it is difficult for them to let go of such practice, as they linked to many years of experiences and skills learnt over many generations.

'Us we used to massage the abdomen and position the placenta ("ako basan"), this is important for baby and mother, but these days, they (nurses, NGOs) tell us not touch or turn. Even me for over 20 years I have been dealing with pregnant women, I could tell babies position, if it is lying in "bad position" by touching and can correct it and I have never hurt anyone.' (TBAs FGD1, P3).

According to the majority of TBAs, AAM is necessary for the women and unborn child. This was reflected in many TBAs' detail explanations of its benefits, signifying a potential barrier to the changing roles, particularly in relation to pregnancy-related practices. On this, many TBAs reported having good knowledge and skills of pregnancy care including diagnosis of twin pregnancy and labour onset, providing uterus massage, and childbirth. The procedure, AAM traditionally termed as *'ako basan'* (to prevent placenta praevia), performed in late pregnancy is linked to multiple perceived benefits

as quoted below. Although these practices contrast with TBAs' earlier accounts on changing roles, many TBAs stressed the need for the procedure. However, some TBAs expressed the practice did not prevent women from attending ANC clinics, as they would continue to refer them to ANC clinics, but nurses perceived otherwise, as described in section A. 5.2.A. This might imply that TBAs are having influence on women's use of ANC as referral agents, as some appeared to disagree with the nurses' instructions not to perform AAM, a practice they felt have been performed through many generations. This suggests TBAs are exercising their power on what they believe is deemed necessary, while still engaging with their expected referral roles, influencing women's health-seeking behaviour.

> *'We do abdominal massage from fifth month of pregnancy, placenta moving in front of the baby's head...is not good, so we slowly manoeuvre it until it goes back to its rightful position. If not reposition, it deepens in into the pelvis and women will not be able to walk, the head push down and presses on and the mother will be in a lot of pain. Massage also wakes up lazy baby and helps labour progress. We tell women to go to the clinic, but they still come to us for some help. Nurses tell us not to massage, [laughing]… that one, no, they should not tell, this thing even our forefather have been doing, our girls feel so relieved…light, the pain will go, massage is good for the baby and mother.' (TBAs FGD2, P4).*

Expressing concerns on the potential loss of their traditional roles, a few TBAs perceived that the '*learned*' persons (referring to the nurses) have taken on their roles e.g. childbirth and pregnancy care, diminishing their power. This related to the perception that instructions were given by the nurses for them not to practice traditional pregnancy care roles, and instead refer women to the health facilities. This difficulty in fully adapting to their changing roles was captured in some TBAs continuous comparison of past and contemporary pregnancy care practices. For example, the following comments from some

TBAs' demonstrated feelings of uncertainty, as they found it difficult to let go their traditional roles and integrate to modern healthcare system, *'even in olden days'* or *'we did not go to hospital those days'* or *'it is a trend in our world'* or *'we are told to'*. However, due to the expectations from the NGOs, government and the nurses, and perception that contemporary practices are better, the majority reported getting used to the changing roles and acting as referral agents.

> *'You see we know this work, checking the pregnancy from our forefathers on how to check babies in uterus, but you learned people have taken our work and now you tell us not to do it" we just accept. [laughing], but I think clinic is better than the work we have been doing and I tell them to go to clinic.' (TBAs FGD1, P3)*

Drawing from TBAs' account, it appeared that TBAs had multiple responsibilities and played a critical role in linking women with ANC use, despite their ambivalence in not exercising their traditional skills and roles. By acting in both capacities (traditional and referral agent), however, TBAs roles appear to be critical in both contexts, and they also seemed to avoid conflicting with the expected new roles while still practicing their traditional roles. Nonetheless, as described next, several TBAs reported numerous challenges to connect women to healthcare services.

5.3.B Expressing difficulty connecting women with healthcare

Reflecting on their expected referral roles, many TBAs reported challenges at a community and health system level connecting women with healthcare. For the majority of TBAs, despite expected referral roles, infrastructure to support the roles was limited, diminishing their power to link women with healthcare. Most of these challenges which were described earlier in Chapter 4, and Section A included a lack of reliable means of transport and cost, poorly maintained roads, harsh weather condition and long physical (walking) journey

to the health facility. The referral roles and women ANC access was further compounded by the low socio-economic (poverty) situation of the community, to always afford transportation and treatment cost, due to environmental challenges (drought) that diminish their livestock (the main source of livelihood), and the herds moving further afield meant women were economically challenged. According to many TBAs a typical lifestyle of pastoralist community also contributed to missed opportunities or delayed ANC access for some women, as they followed animals further afield to meet nutritional needs during pregnancy. For some TBAs this migration made their referral roles a challenge.

Overall, for most of the TBAs getting in touch with health care providers was a key challenge, particularly when faced with pregnancy related problems. This related to the lack of telephone services, where sometimes they were forced to walk up the hill to find telephone network coverage while still handling a sick pregnant woman. Although, they felt such experiences were discouraging, many TBAs reported struggling to link and escort women to health facility, mostly having to make long journeys on foot before means of transport (either ambulance or private means) arrive. For the majority of TBAs, the limitation of resources at the dispensaries made their referral roles more difficult and was discouraging. However, the frustration and concern of having to lose a mother because of these challenges was disempowering. Some TBAs summed up these challenges by expressing a sense of being '*left out'.* This demonstrated the difficulties they faced, even though they accepted and recognises the importance of referring women to healthcare. These findings appeared to suggest a community, both in need of and desiring healthcare services, despite the multiple challenges to access. In this regard, all TBAs strongly expressed a need for the government to address the access challenges e.g. poor roads to access the health facility and the provision of services closer to the villages.

> '*Our biggest problem is the road, distance to health facility sometimes the woman start bleeding, before we get to hospital we, lost her…others we almost lost, Women during pregnancy they suffer…long distance to this clinic, and that is*

why going to this clinic many times as they are told is not possible. We have asked for road many times from the government nothing is done. We are tired of asking'. We better keep our girls at home [laughing]. We are left out [laughing], government need to help us.' (TBAs FGD2, P2)

Attendance at ANC is further challenged due to distance to the nearest health facility. In addition, many TBAs reported a lack of resources (e.g. ambulances) as making their referral roles more difficult. This was further challenged when the women could not afford to pay for private transport due to their low socioeconomic status. Long walks to the dispensaries was reported by some TBAs as risky due to prospect of being attacked or bitten by wild animals like snakes, and scorpions. This suggests that the barriers to healthcare access were not only the affordability or resources limitation but also the fear of physical harm. All these challenges implied that women's use of ANC and generally maternal healthcare services during pregnancy was limited.

'Imagine there is no ambulance, a pregnant woman having problem of bleeding or a mother in labour at night, how do you expect us to walk to the health facility, sometimes we walk until transport arrives. We try, our girls try to go to clinic but is far. There are wild animals, snakes and scorpions, it is not easy as they expect us to go for clinics, deliver in hospital every time …look this place is far. Many people, their animals are far away in 'fora' and they are poor, no cash to hire private vehicle. Let them give us means of transport to get there, bring clinic to the village (TBAs FGD4, P2)

The above finding seems to suggest a need for service delivery, to make the referral roles of the TBAs easier. For instance, a simple statement such as '*we try'* shows a positive attitude towards healthcare services and they appreciated the importance of attendance at ANC needs to be supported.

According to many TBAs contacting the HCPs remains additional challenge, particularly when faced with pregnancy-related problems and that influence ANC uptake.

> *'In some area there is no network, somebody has to go up the hill to make a phone call in case of emergency...' (TBAs FGD2, P1)*

Related to pastoralist lifestyle, some TBAs perceived that some women follow animals when they migrate further afield to meet their nutritional need (e.g. milk from animals), contributing to limited healthcare access. Also, women would only return to the village for childbirth or delay attendance at ANC. This demonstrated a typical lifestyle of pastoralist community and the influence that it has on utilisation of ANC, that is delay ANC use and/or non-attendance.

> *'You see some pregnant women follow animals that migrate for pasture during dry weather,…yes… to get some milk and they do not come to the ANC clinic, or come when almost about to give birth, how can we refer, they are far in the field, some only come back to the manyatta to give birth and that is when they will then take baby to clinic, some go when they are about to give birth.' (TBAs FGD2, P5)*

According to some TBAs, referral roles further became problematic because of the community practice of early marriage and some women hiding their pregnancy. Early marriage was reported to be common practice among this community and was perceived to contribute to delays in early ANC visit. This was particularly common among young first-mothers, due to lack of knowledge, shyness, and fear to disclose their pregnancy-fear associated with being seen pregnant while still young, meant less willing to be seen in public. However, even though the latter makes the referral roles difficult, many TBAs reported encouraging them to seek healthcare service.

> *'but for the first-time mothers when I see her in the village, I tell her to go. You see our girls are married early in this community, they fear, and many do not know, and they are shy to go, if they get pregnant when young. I encourage young*

mothers to go if we know they are pregnant, but you see they hide pregnancy and it is not easy for us to know they are pregnant.' (TBAs FGD4, P2)

Many TBAs expressed concern about dispensaries being ill-equipped and this negatively influenced their referral roles

'Oh, this hospital, do not have anything, nothing to check mothers. We take them there and they tell them to go to the main hospital. Leave alone building one (dispensary), the government to first equip the other facility we go to, it doesn't have water, no light, even the delivery bed is so small, no drugs and things to check if you have diseases, only that thing for checking 'pressure' and that one for weight (weighing machine), they have nothing. How do you expect women to go there, with nothing to help them, stay home instead of trekking all that long distance, and not given services' (TBAs FGD3, P2)

The discussions with TBAs further revealed that sometimes they accompany pregnant women to the clinic, but the absence of the nurses at the dispensary due to staff shortages acted as a barrier and discouraged attendance at subsequent visits.

'Sometime the nurse does not come maybe she is sick, you see we only have one, and when we bring pregnant women to this place and its close, we won't be able to come back again man y times (TBAs FGD4, P4)

A few TBAs equated the approach of nurses and the style of services delivery to perceived quality of services, where some nurses are reported to provide better services than others. As such, despite women attending ANC clinic, TBAs thought this restriction affected ANC uptake and service satisfaction

'It use to be a bit better, in terms of services when the other nurse was here, women like her and us too, but this days nothing is there, not even teaching, women just go there but

no much provided, the one who was transferred even call and teach us, but this one, not even for women.' (FGD 3, P2).

There was also consensus among TBAs that a concern regarding ANC uptake was the lack of mobile outreach clinics, and inconsistency of few available in the villages. The few mobile outreach services available were reported to mainly provide immunisation services for children. Many TBAs expressed a need for all-inclusive outreach services that catered also for women's needs.

'even that one (referring to outreach services), comes few times, it not even there anymore, they do not check on women but only children vaccination, women are told to go all the way to the health facility for tests, this clinic if at all it will be back, should also help our pregnant women, then they will attend.' (TBAs FGD4, P1)

From the above finding, the TBAs seemed to suggest the difficulties they encounter in linking women to healthcare, resulted in under-use of ANC services. However, their concern is also when, despite finding help, their problems remain unaddressed.

5.4.B Impact of culture on ANC use

Among the TBAs, there was almost full agreement that cultural beliefs primarily influence childbirth practices but also affect use of ANC. Childbirth at home was linked to a cultural practices related to protecting and ensuring smooth labour progress due to the belief that if known to many people, labour progress and childbirth would delay, the culture associated with the anxiety of anyone waiting for the baby could delay labour progress. A key issue was that the cultural beliefs and social norms of the community have the negative impact for women with out of wedlock pregnancy, since such pregnancy is culturally unrecognized. As such even TBAs reported not providing supportive

roles even for first-time mothers with out of wedlock pregnancy, yet they earlier reported that young women required support to accessing ANC clinics. Almost all TBAs reported women with out of wedlock pregnancy navigate their own ways to accessing ANC. This is mainly related to the communal belief that it is an 'unwanted pregnancy', and there is a fear of associating with them. This fear related to the community perception that a TBA who helped women with out of wedlock pregnancy may have had a relation in the pregnancy (e.g. a relative may have been involved), hence they keep distance to avoid blame. This assertion about social norms about out of wedlock pregnancy was evident during focus group discussions where almost all TBAs found it an unease topic to discuss in the group forum. This demonstrated the strong influence culture has on the pregnancy experience of women with out of wedlock pregnancy, influencing their pregnancy disclosure and use of ANC services. Other issues influencing ANC experiences included the impact of traditional gender roles and burdens and spiritual beliefs.

Although cultural beliefs are associated with childbirth, culture has less influence for attendance at ANC, according to many TBAs.

> *'In our culture during delivery, labour is kept secret until a woman has delivered, because we believe that if known by many people, the labour is prolonged. In pregnancy, there is no culture that prevent women from using clinic, early visit is delayed.' (TBAs FGD2, P4)*

However, religious beliefs about pregnancy being protected by God, contributed to the limited need for ANC among some TBAs, as they believed that '*nothing*' would happen even if women did not engage with ANC clinics. This may have an implication on their expected referral roles.

> *'You see God has created the baby and he will look after it.(yes! Yes, others said in chorus), that is what we believe. During our time no clinic and we stay home, give birth at home, God protect us, and nothing happened to us and our children, even now nothing will happen.' (TBAs FGD1, P4).*

An emerging key issue is TBAs attitude towards women with out of wedlock pregnancy and the impact this has on their ANC experiences, all TBAs reported not providing referral support to women with out of wedlock pregnancy. As also mentioned by other participants (women and nurses), many TBAs reported that women with out of wedlock pregnancy keep their pregnancy a secret and do not engage with healthcare services.

> *'Oh those girls who get pregnant before marriage, it is real bad in our culture, no, no such women we do not bother with them, even if we see, we do not refer them to the clinic...they hide pregnancy. In our culture, no we don't want them.' (TBAs, FGD2, P4)*

To further emphasise these strong cultural and social norms related to out of wedlock pregnancy, all TBAs expressed their wish not to discuss the issues related to out of wedlock pregnancy during FGDs and requested such discussions to be concluded. In a powerful term, some TBAs expressed uneasiness about the topic, instead, preferring discussions on what they termed *'clean women'* (married women). These perceptions about out of wedlock pregnancy seem to make pregnancy disclosure and use of ANC difficult for such women, suggesting high risk for pregnancy related problems.

> *'We do not talk to them; it is against our culture. We keep off such cases. They just have to take themselves to the ANC clinic when the pregnancy cannot be hidden any longer.' (TBAs FGD1, P2)*

> *'No, we are at peace, God forbid no, do not ask us about those girls, unwanted, just stop, just ask us only about married clean women.' (TBAs FGD2, P5)*

While a few TBAs reported on men providing practical support, the majority perceived otherwise. According to TBAs, pregnancy care is culturally recognised as women's role. Thus, men's help with household chores, allowing women the time to attend the ANC, or accompanying women to clinic,

was limited. However, men's lack of involvement, is partly linked to their pastoralist lifestyle of herding.

> *'Our men do not know about clinic, even those who have not gone for 'fora' they do not bother, our men they see that as woman business, they don't go with them to clinic. ….in our culture pregnancy care is our role……these pastoralist men follow their animals. [Laughing] to them this clinic is just a story, they see them going or not, it is ok for them', they do not help us with loads of work at home, may be few.' (TBAs FGD3, P2)*

5.5.B Impact of knowledge on ANC uptake

According to many TBAs, having knowledge or lack of it plays a key role in influencing ANC uptake. This they relate to their own knowledge of the ANC, women, and the community. The majority of TBAs reported having a basic knowledge on the importance of ANC, which was gained from the training offered by NGOs, and they believe their knowledge influences women's attendance at ANC, as they provided referral roles. However, many TBAs believed women and other community members' (e.g. men) knowledge of ANC is limited, and that influence ANC uptake. For example, many TBAs perceived that men's lack of engagement in the ANC clinic is not always due to their pastoral lifestyle of herding, but also their lack of knowledge of ANC. Nurses' knowledge is also perceived to influence ANC uptake.

The majority of TBAs appreciated the knowledge they had gained from NGOs training. It was established during the field visits that some NGOs train TBAs on maternal health issues. An informal conversation with one local NGO's key informant revealed that the aim of training workshops was to support TBAs and provide them with some basic knowledge on the maternal healthcare, so that they (TBAs) can act as referral agents. As such, some TBAs reported having skills and knowledge to diagnose pregnancy-related problems and

provide referral to ANC clinic, although some women's tendency to hide pregnancy due to lack of knowledge made their roles difficult.

> *'I know a woman is not having enough blood during pregnancy by touching her hair, which will be feel like steel-wire and her tongue, which will be pale, and I will tell her go for clinic to check her blood. We push these women to use the facility, they think we know as much and should care for them at home, but I tell them to go. Some hide pregnancy and you can't know until late in pregnancy.' (TBAs FGD3, P1)*

Premised on knowledge gained, many TBAs indicated that attendance at ANC was important, as it has health benefits to assess and manage pregnancy-related problems, thus they provided the referral services to the women. As described in the quote below, it also appears that TBAs' traditional roles are being discouraged as they are provided knowledge on importance of attendance at the ANC to influence ANC utilisation.

> *'We now know...clinic helps, we refer them, women are checked for problems...they told us not to care for women at home, not to give those uterus massage, not touch people's blood. They told us again if a woman has problem with the pregnancy like…uterus massage can cause bleeding or at child birth, we have nothing to help them with, so they tell us not to deal with any pregnancy related issues, we tell them to go.' (TBAs, FGD1, P4)*

Although the majority of TBAs admitted encouraging and connecting women with the ANC, some linked non-attendance to a lack of knowledge among some women on importance of ANC.

> *'Besides the distance I do not know why, but for some it is knowledge...they do not understand. For us who have been told the importance of clinic, we encourage them to go.' (TBAs FGD4, P2)*

In addition, many TBAs perceived that community attitudes towards ANC was linked with their knowledge, which was believed to be lacking, particularly among men to accompany the women to attend ANC clinic. This was related to previous accounts about the views of women that the lack of knowledge of the elder's affected ANC uptake, and TBAs account also suggested that a lack of knowledge was an obstacle to ANC use in the community.

> *'I think our people do not know much about this service, they do not understand this clinic things, no information about importance of clinic to help their women to go for this clinic, elders, husbands' (TBAs FGD4, P3).*

However, the knowledge TBAs possessed did not seem to translate into empowering women and community, especially on importance of attendance at the ANC clinic, as many TBAs reported women lacking knowledge about ANC.

> *'We have knowledge of this, clinic is good for pregnant mothers, baby and checking disease, they learn a lot…they do not' (TBAs FGD2, P1)*

In explaining why acquired knowledge was not translated into community practice to resolve the perceived knowledge gap, most TBAs admitted that their role was to identify and connect women to health facilities, while nurses would provide health education.

> *'We are told our role is to bring the women to clinic, nurses were to provide them all they needed, teach them why they need to go to hospital, that is not our role,' (TBAs, FGDs 1, P4)*

A few TBAs further indicated that the knowledge of nurses was deemed important for the delivery of health services and the right interventions to influence health-seeking behaviour of women. However, some TBAs felt that a lack of the same increased doubt about the capability of nurses to provide

community services. Such experiences, as explained in the quote below, affected attendance at ANC clinic.

> *'But there was one time a woman started to bleed a lot. She put her on a lot of water (intravenous infusion), she finishes quickly around 4 bottles, and woman keeps on fainting even after that. This nurse could not do anything, imagine going to the hospital and the doctor is not helping, luckily another doctor (clinical officer) came and gave her different bottle of water, after just two of those bottle, the girl was all fine, you see even some doctor (nurse) they do not know what they are doing.' (TBAs FGD3, P3).*

From the above section, it is clear that TBAs play important roles in connecting women to healthcare services, while they face numerous challenges within their settings that influence women's ANC use. The findings suggest need for addressing the challenges TBAs faced to perform their expected roles. Table 10 shows the socio-demographics details of TBAs in the current study. The TBAs in this study had many years' experiences in traditional pregnancy care and childbirth, ranging from 10 to 36 years.

Table 10: Socio-demographic characteristics and locations of participating TBA (n = 17)

Pseudo name	**Age**	**Marital status**	**Experience (in childbirth)**	**Villages from where TBAs were selected and FGD**
FGD 1				
Tumio (p1)	73 years	Married (widow)	17 years	1
Halima (p2)	68 years	Married	11 years	1
Salio (p3)	62 years	Married	15 years	1
Chulaa (p4)	60 years	Married (widow)	22 years	1
FGD 2				
Garo (p1)	68 years	Married	21 years	2
Dire (p2)	73 years	Married	34 years	2
Sake (p3)	59 years	Married	16 years	2
Allo (p4)	79 years	Married	29 years	2
Rehema (p5)	69 years	Married(widow)	26 years	2
FGD 3				
Tallu (p1)	67 years	Married	30 years	3
Bokee (p2)	62 years	Married	20 years	3
Busu (p2)	60 years	Married	10 years	3
Midino (p3)	50 years	Married	5 years	3

FGD 4				
Wata (p1)	79 years	Married	36 years	6
Habibo (p2)	47 years	Married	7 years	6
Amina (p3)	60 years	Married	16 years	6
Halo (p4)	50 years	Married (widow)	15 years	6

SECTION C: MEN'S PERCEPTIONS OF ANC USE

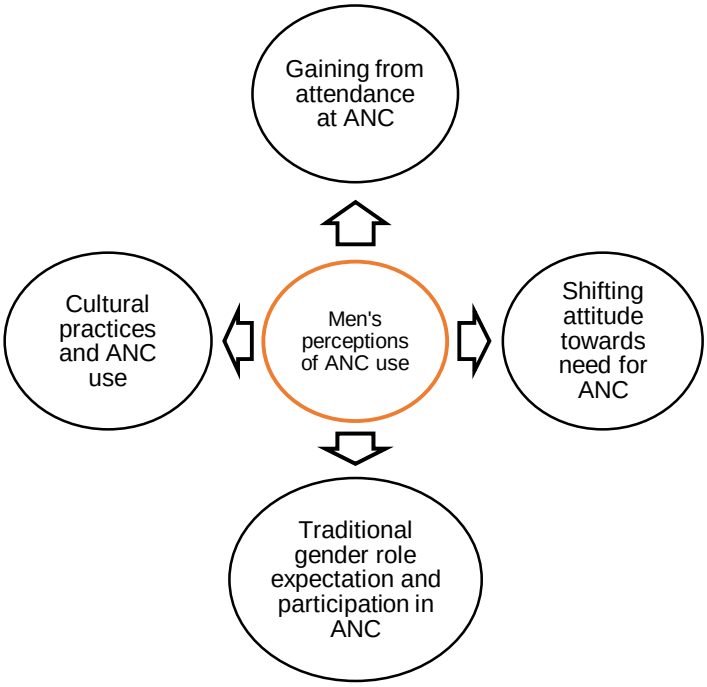
5.0.C Introduction

In this section on men's perceptions of factors influencing ANC access and use, there were many similarities to the previous sections. This includes, monitoring the health of the mother and unborn baby, to obtain the handbook, nutritional support and gaining new knowledge. However, there are a few findings unique to men's accounts, including i) men's views about gender-related roles and participation in ANC-the belief that culturally pregnancy related care is a woman's role and responsibility, and men have no role in attending the ANC. Secondly, (ii) men had shifting attitudes towards the need for ANC. This related to a perception among men, particularly older men, that the modern lifestyle is unhealthy. There was also a perception that the olden days' food practice (e.g. use of animal products) was healthier and readily available. However, due to diminished herds (e.g. animal dying-due to poor weather), and the inability to purchase nutrient-dense diet, community and particularly pregnant women were at increased risk of lifestyle diseases, hence their need to attend the ANC for health assessment. These views about comparing modern and olden days' way of life with the latter perceived to be a healthier way of living, suggested a positive attitude towards attendance at ANC as a gateway to seeking health for the perceived unhealthy modern lifestyle. This suggested a shift in health practices during pregnancy, and the opportunity for healthcare service use.

There was also a perception among a few young men that the knowledge gained from attendance at ANC clinic was helpful in making decision on food practices after childbirth for women. This they related to cultural beliefs that women were starved from solid food for weeks following childbirth, however, attendance at ANC and hospital delivery had changed their food practice, hence a few young men believed that attendance at ANC had a health benefit. This demonstrated a shift in traditional ways of pregnancy care that had a

positive impact on women health seeking. Figure 15 shows key themes in men's views of ANC access and use.

Figure 15: Key themes in men's views of ANC access and use



5.1.C Gaining from attendance at ANC

For many younger men, attendance at ANC provided health benefits, such as the provision of medication, nutritional support and health assessment to improve general health. Additionally, few men perceived that women attended the ANC clinics due to what they termed '*inner-self not ok'* during pregnancy. This related to the changes that occur during early pregnancy, such as vomiting, and that warranted a need for attendance at ANC for health assessment. This illustrated that ANC was viewed positively as gateway to monitor health e.g. when faced with pregnancy related problems.

> *'You see when a woman become pregnant, some face different type of problem, some suffer a lot, vomiting and their inner-self is not ok and they need to go the clinic to be check and told what their problem is'. It all happens to my wife and*

she went to clinic and clinic help to check the problem. Going there their blood level is checked, some tablets are given which some of it helps, I heard that from her, so they go there for all these.' (Men FGD3, P3)

As mentioned across the entire group (women, TBAs and nurses), men also linked the need for ANC visits to collect the handbook, an important document that entails achieving future needs for their children.

'My wife tells me, she goes to clinic because she also needed to get that handbook, which she says is important for our child clinic.' (Men FGD4, P2)

Attendance was also linked to the opportunity to monitor foetal status, hence some men reported encouraging attendance.

''She says something was put on her stomach and told the baby is breathing and is ok…clinic is good; they are given treatment. We tell them to go.' (Men FGD3, P2)

In addition, due to persistent food insecurity related to dry weather patterns that affect their animals leading to inability to purchase a healthy food, some men reported encouraging their wives to attend the ANC to gain food support (porridge) for their nutritional needs.

'They are given some porridge that gives her strength…good for her health. Because of drought there is no good food…no money, animals are weak to sell. We tell them to attend.' (Men FGD3, P3)

From the men's accounts the perceived benefits, which are for mother and unborn child acted as a key motivator for attendance at ANC.

5.2.C Shifting attitudes towards the need for ANC

This is an emerging issue among many men (young and older) that demonstrates a positive attitude towards a need for attendance at ANC. For many young men, attendance at ANC is related to their belief that contemporary care is a new way of lifestyle, that provides women with the opportunity to monitor pregnancy related changes (e.g. vomiting) and provide the opportunity to gain new knowledge. However, for many older men, the shift was related to a belief that modern lifestyle is unhealthy due to emerging new diseases (e.g. HIV), environmental factors (e.g. air pollution) and a lack of healthy diet. In addition, there was a strong perception among some men, that in the olden days' women did not need to use healthcare services because they were healthier. The situation was further compounded by a lack of adequate healthy food, which they believed was there in olden days. In this circumstance, the key issue for young and old men was the need to seek contemporary healthcare to rule out lifestyle diseases, health assessment and nutritionally supported. According to many men, this positively influenced attendance at ANC, as narrated below.

> *'In olden days' people eat healthy food, they did not get disease, did not need to go to clinic…women were healthier, they eat well our animal product, no sickness like these days. These foods we eat now not as good, our healthy is not as good as our forefathers. Also, there are many diseases like AIDs, even the air we breathe is different (Men FDG1, P3).*

> *'Pregnancy makes women even weak; they get sick easily, going to clinic will help, yah, it helps, women are checked for diseases, drugs and porridge given.' (Men FDG3, P4).*

For some younger men, contemporary care is a safer and better option to monitor pregnancy progress, unlike traditional practices where pregnant women stayed at home without the knowledge of their pregnancy. This shift in perception among the younger generation suggested a positive attitude towards ANC, hence influencing potential for attendance at ANC.

'I think our olden days practices of just letting the pregnancy managed by the traditional midwife is not practical these days, they give them uterus massage and deliver them at home, yet they won't know what goes on inside the uterus and how the baby is, women need to go to clinic.' (Men FDG3, P3, CHW)

Also, beside acknowledging TBAs' as a source of information, linking women with healthcare and support for their wives, few young men also recognised the need for contemporary care as an opportunity to gain additional knowledge. This comparison of both traditional and contemporary pregnancy care practices suggested that some men (particularly young men) had some understanding of the need for the ANC, and desire for a change to contemporary care. This would be important in promoting women's health-seeking behaviour.

'Our mothers (TBAs) already know about the baby in the uterus, they advise them, send them to clinic, but I think the knowledge women gain from the clinic is more and superior to the traditional mothers' knowledge.' (Men FGD3, P4)

The above views of men from the village closer to town and health facility, particularly among the younger members of the group may suggest that age and place of residence may have influence on attitudes towards the use of ANC, as they seemed to have some understanding of need for ANC.

However, for some men, (particularly older ones and from furthest villages), ANC was viewed as a new way of life, and a directive from government that had impacted on their traditional pregnancy care practice. Hence, women were expected to follow even though they believed their traditional practice was also valuable. This suggest a past, which they are reluctant to let go, and a modern lifestyle which is at hand, are influencing their ways of life and pregnancy care practices.

'This new ideas of ANC clinic comes from people like you and government, it is new life style that we are to follow, [laughed], even our mothers never went to ANC clinic, they gave birth in

the bush while herding the animals or at 'fora', away from manyatta.' (Men FGD4, P4).

In addition, some men believed that formal education is exerting pressure on the community way of pregnancy care practices and is creating a shift towards contemporary care. For instance, some men believed that nurses in their professional capacity are influencing attendance at ANC by discouraging traditional pregnancy care practices. This is believed to influence health seeking behaviour and their attitude towards the need for ANC.

'We follow the changes…that comes with education, we leave ours and follow what these nurses tell us, they tell us not to practice ours. Educated people tells us…women to go to clinic, even though we know ours too is good' (Men FGD1, P3)

Women making their own decisions may suggest a positive shift towards using ANC, as some men reported that in the contemporary world, women do not require their permission to attend ANC. In addition, some men reported that permission was not needed from mothers-in-laws or TBAs to visit ANC, unless when consulting about pregnancy-related issues. Men's perceptions about women making their own decisions, and the self-realisation that they can allow women to decide on their own about ANC visits, may illustrate a cultural shift and a change in society regarding decision-making ability, which may have implication for attendance at ANC.

'Women these days go to the clinic without involving our mothers or TBAs, they will only consult them if there is problem, they don't need our permission to go also.' (Men FDG2, P4).

5.3.C Traditional gender role expectation and participation in ANC

Throughout the discussion, most men continuously expressed that gender roles are socially constructed; hence many men associated pregnancy care and involvement in ANC clinic as a woman's role. This traditionally defined gender role division was clearly displayed during group discussion, as almost all men were hesitant to discuss issues related to ANC clinic, terming it as women affair. As a result, almost all men reported that ANC visits and pregnancy related issues are discussed amongst women themselves and men are less involved. These perceived roles boundaries which are even linked to God's creation seemed to be a major barrier to men's participation in ANC.

> *'You see this is women affair, they do not tell us, culturally we believe, God created role for each one of us. For us is our animals we are expert in that. When it comes to clinic and childbirth, housework and others…ask women… we leave it to women. We let them to go.' (Men FGD1, P4).*

From many men, as demonstrated in the above and next quote, it is clear that women gained little practical support due to the traditionally organised system of role division that appeared to govern male and female roles and created a barrier. This may have implication on women's capabilities to attend ANC clinic regularly, as reported in previous sections. Most of the men perceived their main responsibilities is animal affair, more than for ANC.

> *'In this culture we have different roles, for men, in the morning we let the animals out after milking to the grazing land, women do other house chores and other women affairs, 'that one of the clinics, we do not know, because my main concern is how to and where to graze and water my animals.' (FGD4, P3).*

Based on traditionally organised system of role division, the majority of men reported that pregnant women, mothers-in-law, and TBAs have shared responsibilities, discussing ANC and pregnancy-related issues among

themselves, rather than with the men. This further suggested that the social construction of gender roles acted as a barrier to men's involvement in ANC clinic.

> *'The pregnant women, mother in-laws and TBAs, their plans are together, they know each other's program about this clinic and pregnancy, she will go if she finds time, but for us men our plans are different.' (FGD 2, P2).*

As a result, many men believed having no roles in ANC and limited communication regarding ANC clinics. They felt clinic related issues were less preoccupying for them, as they follow the traditionally laid out social expectations about gender roles. For instance, men believed in providing for the family. However, this did not negatively influence attendance at ANC.

> *'As men, we do not have any role in the clinic, as long as I provide for her at home, the clinic we don't talk about it. Ours is animal affair, the role of pregnancy care and raising the child is women affair, and we ensure she gets food to raise the child.' (FGD4, P5*).

The above findings suggested that a traditional gender-related division of roles posed a significant barrier to men's participation in pregnancy care, ANC clinic, and their provision of practical support for women to access ANC clinics.

However, for few young men, although their knowledge of ANC is limited, and they are not aware of their need to attend the ANC with their wives, they still reported providing practical support with domestic chores during pregnancy. This view from younger men in the group may suggest a generational shift in their attitudes towards gender roles, which might have a positive impact on women's use of ANC.

> *'We do help her during pregnancy when she gets tired, fetch water, firewood, give her money to buy things food, no, I didn't see the need but if she would have told me, I would have gone...but [laughing]…going to clinics is their role' (FGD3, P1).*

Premised on the perception that pregnancy care and ANC clinics attendance as women's roles, many men reported that the decision to attend ANC clinic is made by women and they do not require men's permission.

> *'Yes, we do not deny them to visit facility for the clinic services, they know when to start and finish the visit. The clinic is only women issue, she doesn't need to ask for permission to attend the clinic, she makes her own plans to attend.' (Men FGD4, P2).*

A salient issue that has emerged is that the pastoralist lifestyle has created an additional burden for women to attend ANC clinic regularly, and for men to get involved in ANC clinic. According to many men, this related to increased responsibilities for women, particularly when men travel far with larger herds as women are left to manage the weak animals left at home. Some men also added that the situation is further made difficult by persistent drought, lack of a reliable water source and proximity to the health facility, meaning women needed to work extra hard. In such situations, women experienced an extra burden of workload, and that limit their desire for ANC use, according to many men. This perception confirms what was earlier narrated by women and TBAs as contributing to limited ANC access.

> *'As pastoralist, even our wives do not have time, they struggle, when we are away with the larger herds, even if they want to go to this clinic sometimes, because of the animals, some are for watering, collecting for them grass and feeding animals, and still they perform other house chores. Drought is making things difficult for us. Our village is far from facility, no water source nearby our women are always very busy fetching water...even old women, expectant or lactating, such chores make it impossible to attend clinics always.' (Men, FGD1, P5)*

However, some men believed that the situation would improve during the rainy season due to a reduced workload, as animals did not require feeding and

watering, and men would have migrated back to the village. Hence, opportunity for attendance at ANC improves due to less role burden.

> *'But when it rains, like now it is better because the work is less, then women do go for the clinics.' (Men, FGD 2, P4)*

The above findings clearly suggest that the seasonal factors (e.g. drought and rain season) that affect the pastoralist community way of life influences women's ANC experiences, both positively and negatively.

5.4.C Cultural practices and ANC use

The views of men have shown that cultural beliefs and traditional practices associated with pregnancy disclosure, out of wedlock pregnancy and spiritual beliefs have an impact on the women's ANC experiences. A few men also mentioned that although culturally women should not disclose pregnancy in early stages, to avoid '*evil eyes'*, this practice is gradually changing. This suggest positive shift to contemporary care and increasing potential for early engagement with ANC. Beside the cultural beliefs, delay attendance was also linked with shyness and fear among newly married young women.

> *'Women culturally are not supposed to show off pregnancy until it is visible, to protect the pregnancy from evil eyes…but this culture is slowly fading out. Girls who are newly married, the first pregnancy, they hide it, that nobody could see they are shy, they fear to be seen pregnant while still young, she will hide it completely but not because of culture.' (FGD4, P2).*

For the majority of the men who described valuing their culture, out of wedlock pregnancy is a sign of immorality that warrants a woman to be considered a social outcast. This perception had implication on pregnancy disclosure and ANC experience. Although expressing limited knowledge of their pregnancy experiences, many men perceived that women with out of wedlock pregnancy could be fearful to appear in public, and disclose pregnancy, or associate with

other women, since such pregnancy is culturally forbidden. Many men reported that for the family of a woman with out of wedlock pregnancy, the decision for such woman to disclose the pregnancy carried double embarrassment-that of being considered a social outcast for the woman, and social embarrassment to the family in the community. All men agreed among themselves that the hurdle confronting the family and such woman, and the fear of the woman being regarded an outcast meant the pregnancy would be kept a secret. The challenges faced by such women as narrated below by a parent with such experience seems to suggest cultural beliefs negatively impact on their ANC experiences.

> *'You see for my case, my daughter got pregnant before marriage [long pause], when she was 16 years. We consider such case an outcast in our community, when I was told by her mother that she was pregnant, I almost went 'mad, felt very ashamed'. We had to chase her out of our home, no one knows whether they go for clinic or not, they are left on their own. She ran away to the neighbouring community and married there. It is a disgrace; shame and the whole community will talk bad about our family.' (Men FGD1, P1).*

> *'Those ones, God forbid, we do not know. We don't think they go, no one like to know about them, we consider such girls as having no good manners, immoral, they are social disgrace to the all community not only their family.' (Men FDG3, P3)*

The discussion with men also revealed that the beliefs about spiritual protection over unborn baby and pregnancy is considered sufficient, hence some men believed that being pregnant did not necessarily warrant the need for ANC visit.

> *'We believe in God who protect and help the baby to grow, who made the baby? Then why all this.' (FGD 4, P1)*

> *'Even during our time our mothers did not go, and we are healthier, why, God created the baby and he care about it, protect it in the womb and even after birth.' (FGD2, P2).*

Table 11 demonstrates the demographic characteristics of men participants in the study. All men in current study are married and majority are herders and uneducated.

Table 11: Socio-demographic characteristics and locations of participating male (n = 18)

Pseudo name	Age	Marital status	Level of education	Work	Villages from where men were selected
FGD1					
Goriche (p1)	53 years	Married	Uneducated	Herder	1
Jirma (p2)	49 years	Married	Uneducated	Herder	1
Alio (p3)	63 years	Married	Uneducated	Herder	1
Mohamed (p4)	59 years	Married	Uneducated	Herder	1
Omar (p5)	57 years	Married	Uneducated	Herder	1
FGD 2					
Guyei (p1)	49 years	Married	Uneducated	Casual labourer	2
Sham (p2)	51 years	Married	Uneducated	Herder	2
Sale (p3)	47 years	Married	Uneducated	Herder	2
Salim (p4)	35 years	Married	Uneducated	Herders	2
FGD 3					
Dullo (p1)	31 years	Married	Primary	Herder	3
Robbi (p2)	40 years	Married	Uneducated	Casual labourer	3
Mamiyo (p3)	37 years	Married	Uneducated	CHW	3
Halkan (p4)	35 years	Married	Primary	Casual labourer	3
FGD 4					
Dube (p1)	42 years	Married	Uneducated	Herder	4
Chafa (p2)	54 years	Married	Uneducated	Herder	4
Yatte (p3)	55 years	Married	uneducated	Herder	4
Ahmed (p4)	56 years	Married	Uneducated	Herder	4
Simba (p5)	44 years	Married	Uneducated	herder	4

5.5. Chapter summary

This chapter described the views of significant community stakeholders on women's use of ANC clinic. The key issues that influence attendance at ANC are the perceived benefits of attendance at ANC, impact of local infrastructure, roles and responsibilities demands, health system factors, and influence of culture on ANC access. Some of these factors e.g. resource limitations and culture also impact on these stakeholders' roles to provide supportive roles to the women to access ANC. For instance, it was evident from nurses' accounts that women encountered multiple challenges to accessing ANC. However, nurse's emphasis on the benefits for attendance at ANC created many positive

attitudes for women to use ANC. Also, nurses themselves encountered challenges in the provision of services to the women, due to health system limitations. The findings suggested need for addressing the challenges.

Finally, while the above two chapters discuss individual group perspectives on ANC use, the next chapter presents the integration of the findings from across the groups, identifying the similarities and differences about factors influencing women ANC use. The chapter also will discuss the findings from underpinning theoretical assumption (critical realism) to explore the underlying structures and mechanisms for attendance at ANC across the group amongst pastoralist women.

CHAPTER 6
INTEGRATION AND THEORETICAL INTERPRETATION OF FINDINGS

6.1. Introduction

The previous two chapters presented the study findings as follow: chapter four presented findings from interviews with women, and chapter five presented findings from significant community members, including nurses' interviews and observations at the clinics[5], FGDs with men, and TBAs. In these chapters, the data from each group was analysed separately to identify themes and sub-themes. The current chapter represents two key additional analytical steps: (i) the integration of the findings across the groups into analytical themes, and (ii) theoretical interpretation of the analytical themes. To integrate the themes from previous chapters (4 and 5) and in order to identify analytical themes for the current chapter, the following steps were undertaken.

First, all themes from across each group (women, men, TBAs, and nurses) were compared to identify the ones which are similar or different. Secondly, similar themes from across the groups were compared, contrasted, and merged to create integrated analytical themes for current chapter. The themes not fitting with integrated ones were also considered and presented separately, for example 'community in transition'. Thirdly, the meaning of the integrated analytical themes was reviewed, and key elements that act as barriers and facilitators to ANC were inferred. For example, the themes that suggest challenges to accessing ANC are categorized together as barriers (see Appendix 11 for how groups were emerged). The integrated themes in this chapter show views drawn from across all groups combined. Lastly, the retroductive process then allowed for a deeper understanding to identify underlying causal mechanisms and structures that influence perceptions of

[5] *Clinics* in this study refer to the lowest level of health facility, also referred to as dispensary where nurses provide, healthcare services including ANC services.

ANC and patterns of utilisation. Figure 17 demonstrates a summary of key analytical themes from across the groups.

This chapter explains the theme of community in transition, and key integrated analytical themes that demonstrate structural barriers and mechanisms that shaped pastoralist women's ANC experiences. It then presents the explanatory model that emerged from the integration and theoretical interpretation of the findings, which informs the discussion of the study findings in the subsequent chapter.

The integrated themes led to the key finding of this thesis: that ANC use is not completely absent in the community, but that it is partial as illuminated by two key causal mechanisms that influence the ANC experience of pastoralist communities, as demonstrated in the model Figure 18. The model is explained in more detail at the end of this chapter (section 6.6). The next section highlights how the CR approach was used to explain the findings, followed by a full explanation of the findings through the critical realist lens.

6.2. Theoretical interpretations of the findings

Critical realism is the theoretical approach underpinning this research process. According to Bhaskar (1997), critical realist ontology concerns discovering underlying mechanisms or structures that explain phenomena, behaviour, and experiences which are: (a) empirical (observed-experiences); (b) actual (known but not always observable); and (c) real, hidden invisible mechanisms. Through retroduction, which is an epistemological process of facilitating between the empirical level and deeper layers, I explored the data to identify the real mechanisms or structures that provide explanations for women's ANC use (detailed explanation is given in section 3.7.2.4). In retroduction, interpretation considers moving beyond the description of events, instead exploring the deeper layer of their meanings to discover real mechanisms and structures that influence pastoralist women's ANC experiences. Therefore,

applying the three levels of critical realism ontology ('empirical', 'actual', and 'real') to the findings is explained below.

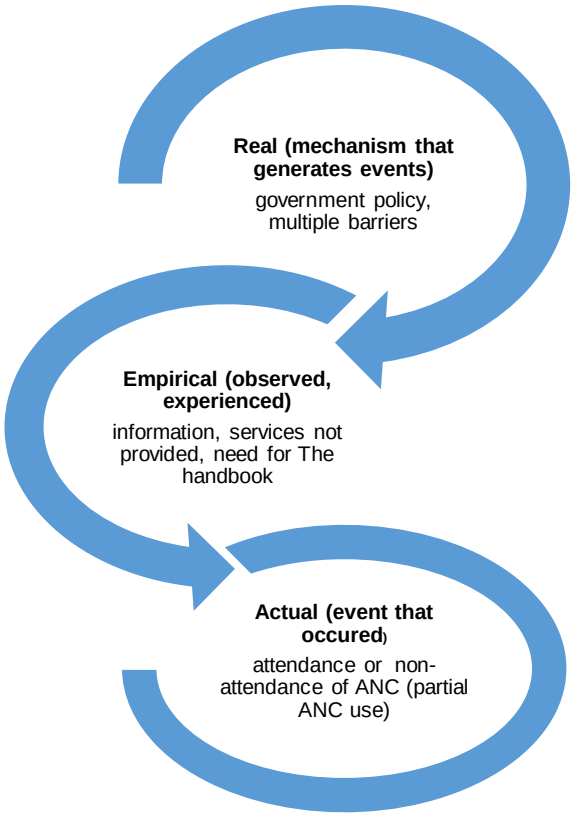
At the empirical level, the findings identify several factors that show the perceptions and experiences of participants, and what was observed during field visits. For instance, challenges of the long distances to the health facilities, lack of resources, and inadequate information that limit access.

The multiple access barriers experienced at the empirical level lead to events that occur at the 'actual' level. Despite all the access challenges, almost all participants reported their need for attendance at ANC clinic even if only once to obtain the handbook and other associated benefits. However, some women also made the decision not to return for subsequent visits due to multiple perceived barriers. Meanwhile, women may also attend but decide not to accept the interventions offered, due to cultural issues or a lack of understanding of the purpose of healthcare service options.

At the 'real' level, the underlying causal mechanisms of events that occur at the empirical level and led to the 'actual' are inferred. Although participants' explanations of multiple barriers were important and indicative of identifying the constraining mechanisms, participants' persistence and repeated emphasis on the need to attend ANC, even if only once to obtain the handbook, made me look beyond the participants' observations to explore other potential underlying real causal mechanisms. As such, most participants' accounts seem to suggest that the need for the handbook resulted from government directives that made attendance at ANC a requirement and the handbook an important document to access government services. Hence it is plausible to conclude that government policy is a key causal mechanism that drives the need for ANC use, as manifested in the community desire for the handbook (for its perceived benefits). Understanding that pastoralist women's ANC use is influenced by government policy, despite complex access barriers in this context, leads to the conclusion that government policy is the real causal mechanism that shapes pastoralist women's ANC experience.

However, although government policy as shown in the need for the handbook and TBAs' roles influence community health-seeking behaviour, manifest in women making efforts to attend ANC, there are ambivalences, lack of understanding, and multiple access barriers that deterred women's agency.[6]. In summary, Figure 16 shows the real influence empirically related to cause events at the actual level. In another word the observations at the 'empirical' world and exploring for the potential events at the 'actual' world helped to uncover the causal mechanisms of the 'real' - to explore barriers and facilitators of ANC use that may not always be observable.

Figure 16: Applying the three levels of critical realism to interpret findings

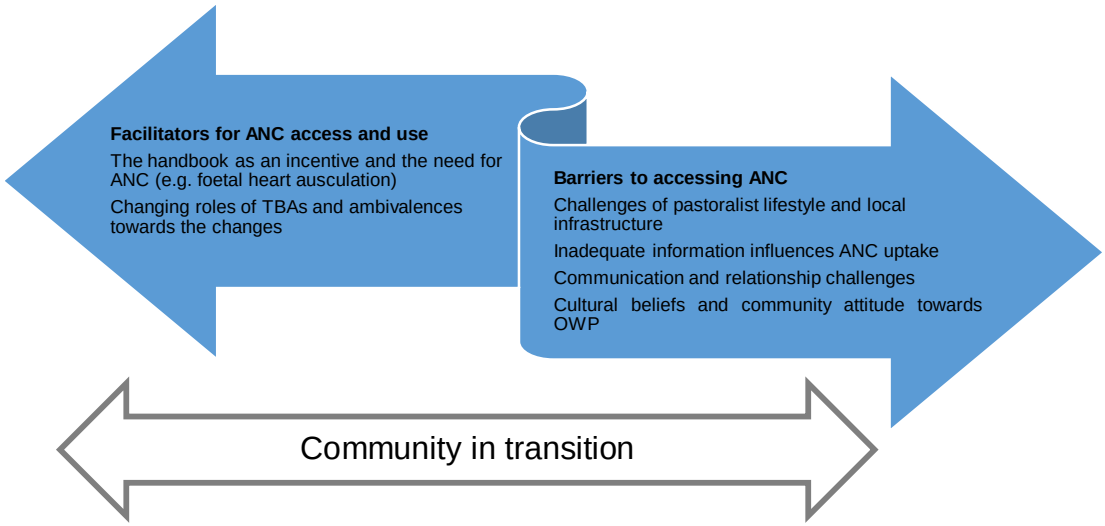


The next sections describe how these complex factors influence women's ANC experiences from critical realist perspectives. Figure 17 presents the key analytical themes from across the groups that illustrate the structural barriers

[6] Agency in this context refers to ability of people to act independently decide and make their own informed choices, which entails a degree of autonomy over the course of action (Archer, 1995). In this study, agency refers to participants' ability to take decisions in a difficult situation.

within the community and health system, and mechanisms that influenced pastoralist women's ANC experiences.

Figure 17: Key analytical themes from across the groups



6.3. A community in transition

This study has revealed a new insight about pastoralist community as transitional community where both traditional and modern care exist to influence care during pregnancy and childbirth. The 'community in transition' occurs because of events that bring 'changes' in the community's ways of health practices, leading to a growing shift to modernity, driven by government policy. The 'change' in this context refers to a transition/shift to using a contemporary healthcare service. The change has not only created a pathway for maternal healthcare services utilisation, but also led to social and economic transition for pastoralist community. A range of social transitions accompanies this shift, including changes in roles, such as the new role of TBAs as referral agents, and community attitudes about the need for healthcare, e.g. social and health inclusion including need for child immunisation and education.

This transition involves: (i) generational shift, i.e. young men/women versus older persons' attitudes to the need for ANC; (ii) social and economic transition, gaining from attendance at ANC e.g. food aid, maternal gift pack and cash voucher for TBAs and need for education, and (iii) healthcare service transition, e.g. TBAs' roles transition, which influences women's health-seeking behaviour, and need for immunisation. These transitions are largely seen as being elicited by government through strategies such as provision of the handbook (as it has several benefits) and the TBA referral role.

However, despite the influence of these strategies, multiple access barriers continue to exist at the community and health system levels, and ambivalences about the changes affected the transition, leading to partial utilisation of ANC (see Figure 18). This concept of partial utilisation is further expanded in section 6.6. Generally, the changes are interwoven across the findings, and demonstrate that the pastoralist community in this study are in the process of transition in relation to navigating the transition from mainly traditional maternal and child health practices toward using biomedical care.

Generational transition involves differences in views about the need for contemporary care between the young and older (men/women). Younger men and women related a need for ANC to perception that it is a new safer and better option that provides women with an opportunity to monitor their pregnancy progress, gain new knowledge, and obtain HIV testing. However, as explained in section C 5.2.C, many older men linked need for the ANC to the perceived unhealthy lifestyle that affects women's health, such as air pollution, emerging new diseases, and a lack of a nutrient-dense diet. Older people believed that these issues led to changes in community health, and hence the need for seeking healthcare. Also, both TBAs and men associated attendance at ANC with perceived emerging modern-day lifestyle diseases, such as HIV, which women are required to be tested for. This they perceived warranted the need for seeking healthcare services during pregnancy, while they viewed the olden days' lifestyle as a healthier one than the modern, where women did not need to attend ANC, yet they had healthy pregnancies and childbirth. The comparison of the 'olden days' and the biomedical form of

pregnancy care, where the latter is perceived to be a necessary consequence of the unhealthy modern lifestyle, influenced attendance at ANC, functioning as a gateway for seeking health as a remedy to the perceived unhealthy modern lifestyle.

Despite the differences in perspectives, the common issue across the age groups (young and old) was that there is need for seeking healthcare services, suggesting motivation to use contemporary healthcare service. The positive judgement about contemporary pregnancy care among the younger generation positively influences ANC uptake. This is particularly important for a community where traditional beliefs are strongly recognised and valued.

Health care services transition involves changes in TBAs' roles from traditional pregnancy care practices to act as referral agents. TBAs act as referral agents connecting the community with health system, hence enhancing potential for utilisation of maternal healthcare services. The key and important aspect of healthcare services and social transition as repeatedly mentioned across the group relate to need for obtaining the handbook for unborn child immunisation and a birth certificate, which is a requirement for enrolment in school. Similarly, with the exception of the nurses, the community perception of ANC as part of the '*new lifestyle'* that women are expected to follow influenced ANC uptake.

Economic transition results from attendance at ANC because of perceived benefits, such as those demonstrated in the handbook. This was strongly emphasised across the previous chapters, and which is expanded upon in the next section. The handbook and the associated benefits lead to economic transition in a community generally reported to be socio-economically marginalised. The need for economic gain is further compounded by persistent drought situations that affected their livelihood and lack of stable income, which in turn necessitated need for attendance at ANC for economic benefits, including the provision of food (e.g. porridge), childcare support, and maternal gift packs. However, although these incentives were needed and contributed to changes in health-seeking behaviour, they were not key motivators for attendance at ANC, as subsequent ANC visits were generally reported by

many participants as limited. This relates to multiple structural barriers that impede attendance, as explained in section 6.5

These perceptions about both forms of pregnancy care (traditional and contemporary) as important practices explain some possible conclusions about pastoralist community use of ANC. First, the community is in transition, attempting to integrate into the contemporary care, amidst multiple access barriers within their context. Secondly, the community follows the contemporary care without conflicting with the government policy, while still maintaining their traditional practices, e.g. TBAs' practices. Thirdly, there is growing shift in attitudes amongst old and younger generations, with the latter seen as driving the need for change. This suggests the need for mechanisms to support the transition, as discussed in the final chapter.

Nonetheless, this study has revealed that despite the government policy to transition the community, and community willingness and desire for change, this transition process remains a struggle for a community, which is already facing challenges of their pastoralist lifestyle and other constraining contextual factors. In this context, it can be argued that there is value in allowing both systems of practices, particularly in relation to TBAs' roles. By this I mean empowering them to provide support to the women in terms of health promotion. However, I do not suggest that maternal health practice remain primarily in the traditional system. Behavioural changes are important, but there is need for support in the form of infrastructure and policies that reflect the community ways of lifestyle, if this pastoralist community is to full integrate into modern health system.

6.4. Facilitators for ANC access and use

This section describes the integrated themes on community perceptions about facilitators of ANC use. This study found that government policy is a key underlying causal mechanism that drives pastoralist women's attendance of ANC. This is demonstrated in strategies such as the community need for the

handbook, and training and incentivising TBAs to act as referral agents. This demonstrates government effort to shift pastoralist women maternal health practices into modern healthcare practices. It could also be possible that government effort is driven by existing global policies, such as WHO guideline on ANC use (WHO, 2016). With the benefits and conditions attached to it, the handbook not only acted as passport to gaining government services, but symbolically acted as means of transitioning pastoralist community into the larger Kenyan health system, as the need for the handbook made attendance possible. This therefore positively influenced women's ANC use. As explained in the following subsections, these strategies led to some changes regarding healthcare-seeking behaviour among the pastoralist community. These were demonstrated in a gradual acceptance of modern healthcare practices, leading to transition, as explained in section 6.3.

6.4.1. The handbook as an incentive and the need for ANC visit

The handbook, a government document issued to every woman during the first ANC visit, was reported by almost all participants as the most relevant document to accessing perceived benefits. It generated a sense of empowerment and acted as a facilitator for almost all women to engage with ANC clinic. The importance of the handbook was repeatedly mentioned across the previous findings chapters and is expanded upon in the following chapter. The handbook acted as an incentive to access several government services. Ontologically, the handbook is 'real' as it has the causal power to influence attendance at ANC.

In emphasising the importance of the handbook as a requirement to access government services, nurses reported using metaphors such as describing it as an '*identity card'*,[7] alluding to the implication that the handbook is gateway to accessing healthcare services. In addition, there is feeling of a sense of ambivalence, particularly among women concerning access to some benefits

[7] *Identity card* refers to an important document which is an identifier without which accessing needed services is challenging.

without the handbook and a perception that immunisation and birth notification (to obtain birth certificate) for their children may not be guaranteed if the handbook was not obtained as part of ANC. A birth certificate would be a requirement for enrolment in school in future. However, all the nurses emphasised that the approach was a strategy meant to enhance attendance at ANC clinic and delivery in health facility, and the women and child would not be denied the services required even if they have not attended ANC or delivered in hospital. Nonetheless, the perception contributed to almost all women making an effort to attend ANC clinic even if only once. This suggests that the handbook symbolically contributes to social and health services inclusion (e.g. a gateway to accessing healthcare services during pregnancy, at intrapartum and postpartum, immunisation services and education).

Besides, the power of the handbook to transform the social system (including the individual, family, and community dimensions) was demonstrated in the desire to obtain support for children's education and nutritional benefits provided by NGOs, as mostly reported by the nurses. Other participants did not place strong value on nutritional benefit, instead on benefits for the unborn child including immunisation and education. The need to attend the ANC clinic to obtain the handbook for accessing nutritional support, such as porridge, was further linked to low socio-economic status, with most women experiencing food insecurity. The need for the nutritional benefits was further necessitated by poor weather patterns, animal migration, and the diminished number of herds due to drought, according to most participants. These benefits are perceived as being for self, family, and unborn child, as some nurses emphasised that some women sustain the visits due to the benefits they receive as a complement to attending ANC and delivering in healthcare (e.g. porridge flour and maternal gift packs).

Participants also expressed varied views about the need for attendance at ANC. For young women, the attendance at ANC clinic acted as opportunity to confirm their pregnancy and offered reassurance, particularly concerning ‘foetal heart’ conditions, and though rarely mentioned, the need for their self-care. In addition, some young men attributed need for ANC to opportunity to

monitor changes that occur during pregnancy (e.g. early signs of pregnancy, such as vomiting). However, for many older men, attendance was linked with the impacts of unhealthy modern lifestyles that affect women's health, as discussed earlier. These findings demonstrate that despite diverse views, there is clear suggestion of willingness to use healthcare services, which implies the need for provision of health education and services to the community. The differences in perspectives explains the ontological assumptions that there is no one fundamental truth, but there are multiple realities (Denzin and Lincoln, 2000), which contributes to a broader understanding of factors influencing ANC access.

In a situation where rules are imposed for provision of services (e.g. denial of services if clinic not attended and delivery in hospital), this acted as a facilitator due to fear of consequence of non-attendance. For instance, some TBAs, reported that failure to attend ANC and deliver in health facility may require elders' negotiation to access postpartum services. This suggests that the approach by nurses' influences women to make efforts to attend ANC clinic. Although using such approach may appear coercive, it is a strategy to encourage women to use ANC services, as reported by TBAs and nurses. For instance, some nurses expressed concern that some women who live closer to the health facility only attend ANC clinic in last trimester or when experiencing complications, hence the rule acted as a strategy to enhance their attendance.

Nonetheless, implementing such strategy without the supportive infrastructure to enhance regular visits may have led to women not returning for subsequent visits. This again suggests a dissonance between government policy on attendance at ANC and the realities in the pastoralist women's context. This may also explain why the transition process is gradual, and there are ambivalences about the changes.

6.4.2. Changing roles of TBAs and ambivalences towards the changes

There was consensus across the groups that TBAs play a key role in pregnancy care and childbirth practices but that these roles are also changing. The changing roles are demonstrated through government's deliberate policy instance to provide them with training on importance of maternal healthcare service use, and the need to act as referral agents during pregnancy and at childbirth, instead of providing traditional pregnancy care at home. Incentives were provided in the form of cash vouchers and training itself, which acted as an inducement for their referral roles. This in turn provided TBAs with position of power to act as a conduit between government health services and the community, suggesting their critical roles in the community.

Suggestive of their role transition, almost all TBAs reported acting as active agents in the community by identifying and referring women to the health facilities during pregnancy and childbirth. Nurses also agreed that TBAs' roles are to address the social condition (e.g. non-attendance), to link women with healthcare ANC services, and to discourage childbirth at home. This strategy manifests the government role of integrating the pastoralist community into the larger Kenyan health system. The value attached to the roles of the TBAs and the trust that women have in their services placed them in a unique position of power where they can contribute to desired social and health service transition and a change in practices. This therefore suggests why the government uses them as change agents to enhance utilisation of maternal healthcare services among pastoralist women. This positively influences the uptake of ANC services, as many TBAs reported providing referral roles.

Despite the majority of the TBAs acknowledging that contemporary care is a safer option, and providing referral roles, there are also ambivalences about the changing roles and acceptance of changes among some TBAs. These ambivalences are underpinned by the difficulty they experience in not being able to practice perceived skills and practices gained over many years as instructed by the nurses. This relate to pregnancy care, particularly antenatal abdominal massage (AAM), a practice which many TBAs perceived to be

beneficial to pregnant women and their unborn children as explained earlier. This shows that although TBAs recognised contemporary care, their action also seems to show that they are exercising their agency to choose the practice which they felt is deemed important to the women and the baby, such as AAM, which is believed to correct foetal malposition and aid labour progress. The ambivalence to cope with the changing role was further expressed by some TBAs in what they termed as 'l*earned*' professionals taking up their roles and they themselves being instructed not to engage in the provision of pregnancy care.

In addition, besides supporting referral roles of TBAs, nurses' recognition of TBAs' roles in the community suggest that they play critical roles among the pastoralist community. This is linked with the remoteness and nature of community's lifestyle, as emphasised by one nurse, in statements such as '*The government wanted the TBAs' traditional roles to be abolished, but for us, because of the nomadic lifestyle of our people, it is not possible and they are very much trusted by mothers'* (Jill, N1). This sentiment among nurses is supported by the nature of the community's remote lifestyle, as reported in section 6.5.1. However, the statement is in sharp contrast with the expected referral roles of TBAs, further showing a discord in the context of ANC services organisation and delivery, and the realities on the ground, as the need for the TBAs continues to persist in this setting. This suggests that the government effort of transitioning pregnancy care practices from traditional to contemporary among pastoralist communities cannot be fully achieved unless the underlying structural barriers that shape TBA referral roles are addressed.

Even though all participants emphasised the importance of TBAs' roles in the community, there were some mixed perceptions on understanding of their referral roles. For example, nurses and many TBAs seemed to have a clear understanding of the changing roles of TBAs as referral agents, whereas some women and men seemed to have more understanding of traditional pregnancy care, in particular childbirth. Although referral roles were also repeatedly mentioned by them, its details were not fully understood. These differences in opinions about TBAs' roles may be attributable to a few possible reasons.

Firstly, there could be limited level of understanding of the dynamism of the changing roles of TBAs among community members. Secondly, given the pastoralist communities deeply embedded cultural practices about pregnancy and childbirth, their acceptance of the TBA referral role is slow and gradual. Thirdly, resource constraints (financial and human) and the community nature of lifestyle (i.e. pastoralism) made TBAs roles to persist. This may explain the reason why TBAs are needed in pastoralist community, and their role in influencing women's ANC use.

Drawing from the above, the changing roles of TBAs is a key government strategy to promote utilisation of maternal healthcare services. Thus, government policy is an underlying key causal mechanism, as TBAs acted as referral agents in changing the social system (e.g. women's utilisation of maternal healthcare services). However, the ambivalences about not practicing the traditional pregnancy care roles which were learnt over many generations, coupled with other structural barriers, remain a challenge to TBAs' referral roles, and a barrier to their effort to integrate pastoralist women into the modern healthcare system.

In this context, strategies such as need for the handbook and the changing roles of TBAs contributed positively to utilisation of ANC, thus answering the research question about the facilitators of ANC use among pastoralist women. However, implementing such strategies in the absence of clear infrastructure support to address the multiple barriers (as discussed next), suggest that the transition to contemporary healthcare service use remains a challenge for pastoralist women. The barriers that shaped ANC use are described next.

6.5. Barriers to accessing ANC

This section describes the integrated themes on multiple access barriers that influence women's agency[8] and shapes their experiences of ANC service use.

[8] *Agency- refers to ability of the person to act independently decide and make own informed choice, which suggest degree of autonomy over the action (Archer, 1995). In this study,*

The section responds to the key research question that sought to identify barriers to ANC utilisation among pastoralist women. As described above, government policy as manifested in need for the handbook and TBAs roles is the key causal mechanism positively influencing women's attendance at ANC clinics. However, whether pastoralist women would follow the government policy to maintain attendance at ANC is strongly linked to capabilities to navigate the multiple barriers within their context. These barriers emanate from socio-economic situation of the women, their pastoralist lifestyle, resource limitations at the health facilities, inadequate provision of health information and limited communication between healthcare providers and women, and cultural beliefs and practices as perceived by almost all participants. These barriers to a larger extent demonstrate a gap in ANC services organisation and delivery at the community level and within the Kenyan public healthcare system.

Even though these barriers affected women directly, other key stakeholders including TBAs, men, and nurses also experienced challenges in the provision of supportive roles to the women during pregnancy. There are also similarities and diverging views about these barriers. For example, while many women's accounts suggested that pregnancy-related information was not provided, nurses reported otherwise. Women's accounts were also confirmed during observations at the clinics. All participants agreed that geographical and pastoralist lifestyle challenges are major barriers for utilisation of ANC services. The next sections explain how these barriers and ambivalences influence ANC access and use in detail.

6.5.1. Challenges of pastoralist lifestyle and local infrastructure

Almost all the participants expressed that the pastoralist women struggled to access the ANC clinic, and most could manage to do so at least once. This

agency refer to participants' ability to make decision in a difficult situation, including access to healthcare services.

limited access was largely associated with multiple access barriers within their environment, particularly those related to gender roles and burdens, and their pastoralist lifestyle. Others included environmental and geographical barriers (e.g. drought situations, distance, and harsh weather) and economic issues. These barriers directly influenced women's desire to access ANC and sustain subsequent visits. From the interviews, FGDs, and observations at the ANC clinics and field visits, the proximity and accessibility of health facilities was a major barrier for pastoralist women's use of healthcare services in general. The following field note extract was evident of the challenges in this area.

> *Every day during the field visits, I had to leave very early by 6am in order to be at the villages at least by 8am. The villages were very far from the town. On few occasions, I delay reaching villages as planned due to poor roads, despite having four-wheel drive vehicle, I got tyre burst (puncture). My research assistant and a herder helped to change the wheel. I faced challenges of impassable roads, further made difficult by rain, big potholes, rocky roads and poorly marked road network.*

It was noted that all the participants reside in rural villages, and they mainly depended on animal products or purchased food, which many could not afford due to low socio-economic status. This was further compounded by poor weather conditions that affected their livelihoods (e.g. animals becoming weak and dying). This led to some women making choices to address their social problems (e.g. lack of food) by following their animals further afield, to meet their nutritional needs (e.g. milk from their animals). This migration implies women would have difficulty accessing healthcare services or maintaining on-going contact with them, leading to delayed initial visits or failure to attend altogether. For example, some TBAs reported some women would only return to the village for childbirth, meaning the opportunity for ANC would be missed altogether, while others would not return after the initial visit to confirm foetal status and obtain the handbook. Nurses and men also agreed with TBAs sentiments that pastoralist lifestyle significantly influence attendance at ANC.

Observations during the field visits confirmed the challenges of pastoralist lifestyles. In two villages, women (both pregnant and postnatal mothers) were observed preparing to journey to a distant borehole to fetch water and fodder for their weak animals left in the village. In this setting, the borehole was a long distance from the villages. As established from field visits and nurses' interviews, the pastoralist community in this study was temporarily settled around water sources due to recurrent challenges related to drought, however they have a tendency to migrate, meaning opportunities for ANC could be missed. Also, during field visits, I needed to organise FGDs during the early morning hours to accommodate men's pastoral roles of grazing and watering animals far from their villages. In addition, as men travel further afield with larger herds in search for pasture and water (due to seasonal factors such as dry weather patterns), women's roles and responsibilities also increase, as explained in section 4.4. According to many participants including nurses, men, and women themselves, this increased responsibility would limit women the opportunity to maintain regular attendance at ANC. However, with the rainy season, the situation is reported to improve, as women have less roles and burdens, meaning they may have opportunities to attend ANC clinic. This, therefore, suggests that government policy on attendance at ANC does not always resonate with realities in pastoralist contexts, as women's ability to access ANC is determined by the demands of their pastoralist lifestyle. In addition, domestic responsibilities further restrict attendance at ANC, even when there is willingness to return for subsequent visits. These relate to heavy domestic chores coupled with additional roles of managing livestock. All these social roles suggest women's agency to accessing ANC services are limited, as alluded to by most of the participants.

Although most of the women expressed making an effort to access ANC, long distances, usually covered on foot, were a key influential predictor of attendance at ANC clinic, as also agreed upon by other participants. My field experience confirmed participants' accounts. It was evident that the provision of maternal healthcare services in the study area, including ANC, was predominantly organised around static healthcare facilities. This approach does not reflect the realities of the pastoralist lifestyle, as the community have

a tendency to migrate based on the weather patterns, and at times women journey with the animals further from the village. In addition, the journey to the clinics is itself made difficult by harsh weather conditions, poor roads, lack of reliable transport, and the cost of transport, as expressed by all the participants. For example, field observations noted that most villages were over 40 kilometres from the nearest health facilities, and women were observed leaving the villages, as they also narrated, very early before sunrise, possibly only arriving at the closest health facilities late in the day.

Another commonly cited barrier by most of the participants, apart from men, was resource limitations at the dispensaries, which add a tremendous economic burden for women due to onward referral to more distant health facilities. These negative experiences led to dissatisfaction and failure to maintain subsequent visits. Resources limitations also influences provision of services at the dispensaries. During observations of clinics and interviews, nurses expressed feeling a sense of frustration and struggle to fulfil their roles and provide services in a setting they described as challenging, due to resource limitations at dispensaries, being away from their families, and burnout due to a lack of time for themselves.

These challenges may suggest why women attend ANC clinic only once. This implies that the reality of the settings is such that the WHO (2016) ANC guidelines of a minimum of eight contacts cannot be achieved in this context if the structural barriers are not addressed. This suggests that while some structures are reinforcing, such as the need for the handbook and changing roles of TBAs, others are disempowering, influencing women's agency to accessing healthcare services. For instance, TBAs are expected to link women with healthcare services, however many TBAs encountered difficulties in contacting healthcare services when faced with pregnancy-related challenges (e.g. haemorrhages or childbirth by the roadside). This relates to the lack of accessible roads, telecommunications networks, and a lack of ambulances for pregnancy-related emergency needs, aside from the occasional absence of nurses from the facility due to staff shortages. Such negative experiences and encounters while providing pregnancy care demoralise and diminish TBAs'

power of providing referral services to the women, leaving them feeling of sense of marginalisation, and negatively influencing their referral roles. Participants generally felt the government has the responsibility to emancipate the community and address its social problems, including access to healthcare services. However, TBAs' and men's effort to use their social position and power to seek for support from the government remained unaddressed.

These findings suggest that the current model of ANC service delivery is not meeting the needs of pastoralist women during pregnancy, particularly when pastoralist lifestyles of migration with animals are considered. This suggests the need for a context-specific model of ANC service delivery that may address multiple barriers for pastoralist women to access ANC services, as discussed in the final chapter.

6.5.2. Inadequate information influences ANC uptake

Attendance at ANC clinic would have provided women an opportunity to gain health information required on pregnancy care, to alleviate concerns on lack of adequate information. Also, this may reduce uncertainty associated with HIV testing. The findings on the lack of adequate information on pregnancy care is a major concern for women, but it was also mentioned by a few men, which influences ANC services uptake and men participation in ANC clinic. This was also confirmed during the observations at clinics as explained in section 4.5.2. The findings suggested that women desired information on pregnancy care, although the unavailability of the same created ambivalences and acted as a barrier to a full utilisation of ANC services. This suggests that the actions of the nurses as the key actors in service provision influence women's agency about ANC uptake. Interestingly, nurses did not express concerns related to inadequate information, rather they were more concerned with issues related to lack of resources and relationships. Contrary to women's assertion of inadequate information, most of the nurses reported providing health information to the women. Other participants including men and TBAs were

uncertain about provision of health information to the women during ANC visits.

The most notable concern for many women (particularly younger ones) that limited their desire for ANC uptake related to nurses' failure to provide adequate explanation of services provided, leaving women with uncertainty about their pregnancy situation, as expressed by Midino, a young first-time mother: *'She told me… my height was small and baby big but didn't tell me anything more, nothing else… what is that…'* (Midino 18 year). This narrative and many more like this, particularly concerning medications, strongly explains the concerns about the understanding of the purpose of interventions among most of the women in this study. The above quote suggests that despite the young woman showing concern and a need for additional information, she felt that it was not provided, leaving her with uncertainty about what it meant to have big baby and short statue. Women who did not seek clarification on interventions provided stated that they were not certain about what to ask for. This may suggest a lack of understanding, which could have also led to some women not complying with interventions provided, including medication.

There are also differences in opinions between women and nurses regarding whether women's hesitancy to use medical intervention is culturally oriented or is due to a lack of understanding of the purpose of interventions. While nurses relate this to women having fear of adverse effects such as deformities of their unborn children and ill-health for mothers due to cultural beliefs, many women contrasted nurses' views, attributing it to a lack of understanding the purpose of interventions, the unpleasant taste of medicines, and fear of contracting diseases from interventions (e.g. from a blood transfusion). This may suggest that nurses' lack of provision of clear information and to address the uncertainty may have contributed little to foster ANC service uptake. The perceived inadequate information provided to the women during ANC clinic also negatively influenced men participation in ANC clinic. This is particularly important given that some men expressed a desire to accompany their wives, if they understood the purpose of the visits.

In addition, although most TBAs reported having some basic knowledge of the importance of maternal health, their knowledge did not have impact on women. It was not completely clear as to why TBAs did not share knowledge gained with the women, however, some felt that providing health education to the women was beyond their roles, as they felt theirs was mainly to link them with the healthcare services. Despite their presence in the community, little seems to be known about the roles of CHWs, particularly by the women on the provision of pregnancy-related information. This uncertainty about the roles of CHWs, which was raised by some women may suggest challenges for women as they sought health information on pregnancy care. This is particularly more challenging for first-time mothers whose lack of knowledge, fear, and shyness due to early marriages contributed to delayed early engagement with ANC, as mentioned by many participants. This demonstrates that despite the availability of human resources (e.g. CHWs and TBAs) in the community, a lack of clarity on their roles, particularly regarding health education for women and community, may have contributed to underutilisation of ANC. This, imply need for empowering TBAs and CHWs in the community to impact on women ANC uptake, as discussed in the final chapter.

Hence, as highlighted in previous chapters, and based on the above explanations, the key issue perceived to influence ANC uptake is lack of adequate information and explanation about the care provided. This is largely due to the nurses providing inadequate explanations on the interventions, leaving women uninformed and with uncertainty about their pregnancy care. In addition, a few nurses' stereotypical characterisations of women as '*not serious'*, *uneducated*' and *'not used to going to hospital'* (*Robii, 51 years, N5*), may have resulted in the provision of inadequate information to the women. This may have also contributed to women's limited understanding of purpose of ANC and diminished their agency in ANC uptake. It is also possible that nurses perceived that the information they provided was sufficient, or they failed to recognise the impact of not sharing adequate information. This could be attributed to nurse's knowledge of the services themselves or their attitudes toward pastoralist women as uneducated and having limited understanding, as evidenced by nurses' accounts cited above.

These explanations demonstrate that the actions of the agent (nurses) were characterised by inadequate information-sharing, which influenced women's capability in ANC uptake. This therefore imply need for provision of adequate information and explanation of the services provided for the pastoralist women to appreciate the meaning of ANC and to enhance ANC uptake. The provision of inadequate information was confirmed by observations made at the clinics, as explained in the next section.

6.5.3. Communication and relationship challenges

Observations data gave a clear picture of daily practices at the ANC clinics about interactions between nurses and women, how services are provided, and how that influences ANC uptake. As discussed earlier, women, particularly younger mothers, were concerned with the explanation provided for the services offered. For the reasons mentioned in previous sub-section, nurses failed to provide crucial pregnancy-related information to the women, which influenced women's ability to make decisions about the use of the services (e.g. use of medicine, and pregnancy-related care). In addition, observation data showed that despite the handbook being observed to have detailed information on pregnancy care, as earlier explained in section 1.6.2.1, it was found to be underutilised during the consultation process. Even though other participants did not mention this, most of the women confirmed it during interviews, as indicated in such statements as:

> *'There is a lot of information and pictures in it [the handbook], but the nurses do not tell us at all, unless you are lucky to have someone to tell you, like school children.'* (Muli, 29 years)

This shows that women's capability to make sense of information in the handbook is limited. Also, presentation of the information in the handbook in English language did little to offer hope of making sense of the information unless someone interpret for them. Furthermore, women's dependence on nurses for information was compounded by their low literacy level, as

demonstrated in demographic data, which limits their capabilities to make sense of information in the handbook and understanding of the purpose of ANC. The handbook was sought not for its educational purposes, but as a document to secure access to future benefits, such as immunisation for unborn child and birth notification to secure a birth certificate for the child.

While effective communication could have increased the effectiveness of ANC contact, nurses were observed to not provide health information to the women. The observations at the clinics showed that the interaction and provision of services was more overloaded with tasks than providing personalised care to individual women. Services provided included more of essential clinical interventions such as measuring maternal blood pressure, foetal heart auscultation, weighing, and administration of ferrous sulphate and iron tablets. Provision of such interventions without accompanying explanations on the purpose of procedures or interventions, drugs or any side effects, or the information in the handbook left women with limited understanding. Thus, when the nurses become more focused on the task at hand rather than interacting and providing pregnancy-related information to the women, this led to a diminished desire for subsequent visits, as confirmed in the interviews with the women.

The inadequate information is believed to have contributed to lack of full understanding of the purpose of ANC and uptake of the services, including medication and blood transfusion. In most cases, nurses are the ones seen doing the talking, while the women took passive roles. Such top-down, one-way communication entrenches the power of the health care providers and diminishes the ability of women to ask questions, and they were visibly given limited opportunities to ask or be asked questions about their pregnancy. This seems to reflect what was earlier discussed about being educated versus uneducated, and how the internalised perception of inferiority diminishes pastoralist women's capability to exercise personal agency, due to a lack of adequate information.

Observations at the clinics further confirmed the availability of pregnancy-related information in the form of posters and flipcharts. Although these

educational materials were seen displayed on the nurses' desk, and some were mounted on the dispensary walls (see Appendix 12 shows some of the educational materials), these forms of information had no impact on women's knowledge, as they were not shared. Even though most of the nurses reported providing health information to the women, at times, lack of time and heavy workloads were reasons given by a few nurses for spending less time with the women during ANC consultations.

Lack of privacy was another concern, particularly for older women. This was confirmed during observations as the clinic's structures had limited space, with the doors left open, contributing to limited privacy. At the clinic, women's privacy was further compromised by the presence of a CHW or a cleaner in the room, even during physical examinations (e.g. foetal heart auscultation), and when case histories are being taken. Some women were observed verbalising concern about their privacy. Such negative experiences affected women's ANC uptake.

Drawing particularly upon the nurses' data, the initial approach and provision of a conducive environment shaped ANC visits. These include sensitivity to the type of information obtained from the women, effective communication, and trust with personal (e.g. medical) information. A few nurses, particularly the local nurses, are concerned about women's limited trust in them regarding sharing their medical information, instead trust in TBAs, and non-local nurses. This was linked to the assumption that non-local nurses maintain confidential information, unlike local nurses. This has implications on the use of services, as evidenced by some nurses' accounts. In addition, fear associated with HIV testing made some women develop delaying tactics and initiate ANC clinic late. The perceptions that HIV testing is mandatory for all pregnant women, coupled with limited pre-test and post-test counselling services to alleviate uncertainty, acted as a barrier for early ANC visitation.

Therefore, based on several participants' accounts and observations of clinics, it is clear the health information provided to the pastoralist pregnant women did not fully and effectively meet their pregnancy-related health information needs and expectations. However, this could be attributed to the context that

shapes nurses' work in developing countries, particularly in Kenya. A few of such structural barriers that influence information sharing between nurses and pregnant women included the clinic's physical structure, which limited privacy when sharing personal information; resource limitations to provide quality care; and nurses' knowledge and workloads, which limit time for individualised care as demonstrated above. All of these factors reduced nurses' power to provide adequate and quality service, and women's agency in the utilisation of ANC services.

Thus, it can be concluded that inadequate communication during consultations contributes to limited knowledge of pregnancy care, leading to pastoralist women missing out on opportunities to get guidance on decisions to make choices about pregnancy care practices, and contributed to some of their behaviour, such as reluctance in interventions' uptake (e.g. medicine), as evidenced in women's accounts. This, therefore, imply need for strategies that will promote effective and interactive communication between the nurses and the women to allay the uncertainty and enhance ANC uptake, as discussed in the final chapter, section 8.3.1

6.5.4. Cultural beliefs and community attitude towards out of-wedlock pregnancy.

Across all groups cultural beliefs and practices were reported to influence women's access to the ANC clinic. However, although beliefs and practices related to early pregnancy disclosure and use of medicine were mentioned as contributing to delays and hesitancy on uptake of ANC services, the key issue which was extensively discussed across the groups related to community attitudes towards out of wedlock pregnancy. Cultural beliefs regarding out of wedlock pregnancy makes it difficult for such women to engage with ANC clinics. In addition, the anticipated social reaction and stigma related to such pregnancies appeared to have a significant impact on women with out of wedlock pregnancy to appear in public in general. Hence, they used silence and secrecy as a coping mechanism, which led to delays or failure to engage with ANC altogether. According to most of the participants, particularly TBAs

and men, Gabra culture fosters modesty and chastity, which is extremely valued. Thus, any pregnancy before marriage is forbidden, and a woman found to be pregnant is considered as a social outcast. The stereotypical labelling of such pregnancy as 'unwanted' therefore becomes part of the labelling of such women throughout the pregnancy and beyond, diminishing the likelihood of appearing in public and engaging with ANC clinic. As such, there is limited information available about their pregnancy care and ANC experiences.

In addition, as demonstrated in men and TBAs' accounts, out of wedlock pregnancy led to disruption of the social system, including rejection by the family, partners, and the community in general. This further alienated such women, as they endured the pregnancy care on their own. Although one woman with out of wedlock pregnancy was interviewed in this current study, challenges generally encountered by women with out of wedlock pregnancy were reflected in the accounts of most of the participants, all of whom reported how the community looked down on women with out of wedlock pregnancy. The TBAs in particular strongly declined discussions related to out of wedlock pregnancy during FGDs and reported not providing support during pregnancy and childbirth for such women. All TBAs condemned such cases in chorus: '*God forbid, don't ask us about those girls, instead ask only about* "*clean*" *women' (*referring to married women*) (TBAs, FGD2, P5)*, and they all covered their mouths to signify out of wedlock pregnancy is an egregious issue not worthy to be discussed*.* This clearly demonstrates TBAs' attitude towards such women, which has strong implications for their referral roles.

The woman interviewed who experienced out of wedlock pregnancy and a male parent emotionally explained how strong social stigma contributed to fear to disclose pregnancy and use of healthcare services. This particular parent reported that his daughter ended up being an outcast and had moved to the neighbouring communities. This, therefore, suggests that the social ostracism and isolation experienced by women with out of wedlock pregnancy leads to non-attendance at ANC, which would consequently mean an increased risk of

adverse pregnancy related outcome, if the healthcare services are not accessed.

Although nurses expressed not discriminating against women with out of wedlock pregnancy during ANC clinic, the negative impact of cultural beliefs made women in this situation keep their pregnancy a secret. The rare public appearances and disclosure of pregnancy leads to delay or non-attendance at ANC clinics, rendering it more difficult for nurses to provide services to women with out of wedlock pregnancy. However, during childbirth, they have no choice but to seek support from the health facilities, but they nevertheless experience particular difficulties in accessing healthcare services. In addition, out of wedlock pregnancy is mostly experienced by young women, who lack knowledge and are socio-economically disadvantaged, which further increases their challenges to accessing healthcare services. This suggests that there is a strong need for appropriate interventions to address cultural beliefs in a desirable and culturally sensitive way to meet their pregnancy needs. This issue is elaborated upon in the subsequent chapters.

The young women seemed to have wished to initiate ANC early. However, the pressure to preserve traditional pregnancy care practices, coupled with a system of social control contributed to delayed pregnancy disclosure. This related to older women advice on when to disclose pregnancy that contributed to delayed early engagement with ANC clinic. This shows a generational shift in attitudes to ANC use, with younger people's beliefs about pregnancy care practices conflicting with those of older people, influencing women health-seeking. Alternatively, it may also suggest how the community transfers their cultural beliefs or norms to their people, and how the women interpret culture, which certainly influences women's agency in pregnancy disclosure, initial engagement with ANC, and acceptance of medical interventions, as demonstrated in the accounts of nurses and women.

To sum up, the above sections provide insight into barriers and facilitators that influence ANC access and use. The key issues that influence pastoralist women ANC use include pastoralist lifestyle, inadequate information, and culture related to out of wedlock pregnancy. The implication of these structural

barriers includes delays in accessing ANC services, lack of attendance, or hesitancy in services uptake. This demonstrates that despite the key government strategies such as the need for the handbook and TBAs' roles of attempting to transition pastoralist women ANC practices to contemporary care, women continue facing difficulties, unless context-specific strategies are adopted to address the multiple access barriers. The discord between structural barriers and government strategies ultimately leads to partial utilisation of ANC services amongst pastoralist women, as explained in the next section.

6.6. ANC partial utilisation model among pastoralist women

6.6.1. Partial utilisation

Partial utilisation in this context means that pastoralist women do access ANC clinics but do not make full use of ANC services due to ambivalences and structural barriers described in previous sections. Hence, a model of partial utilisation of ANC was developed to guide the discussion of the study findings in the next chapter.

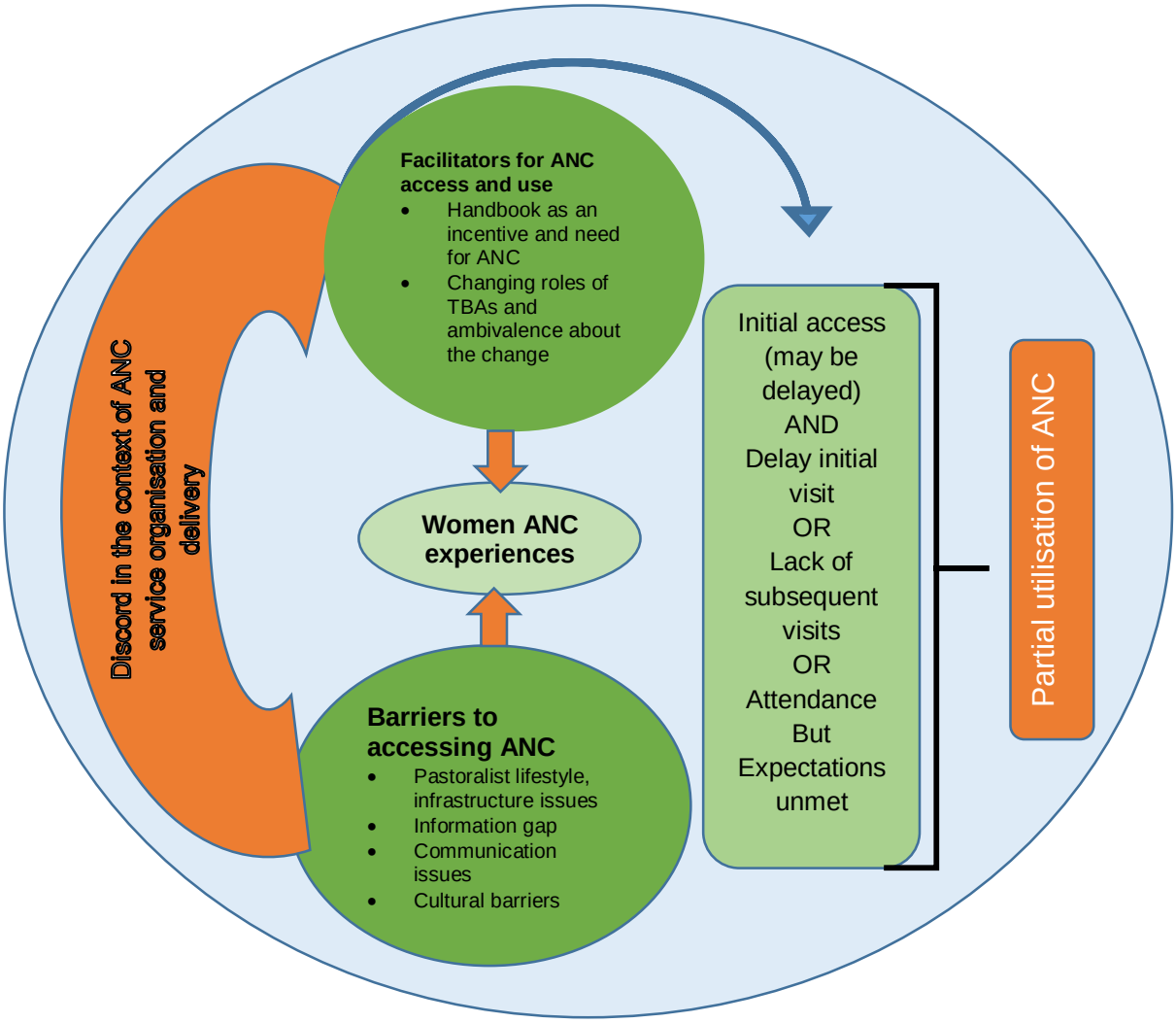
Government policy created the impetus for community pregnancy care practices to shift from traditional to contemporary, but when the realities within the context (community and health system) remain unaddressed, this results in partial utilisation of the services, as illustrated in the model shown in Figure 18. This suggests that pastoralist women missed opportunities for full utilisation of ANC services. The discord in the context of service organisation and delivery suggest any of the following implications for women ANC use: (i) initial access might be made possible due to influence of government policy; (ii) delayed initial access; (iii) failure to attend ANC all together; (iv) failure to maintain subsequent visits; and (v) attendance at the clinic, but expectations remain unmet. These issues consequently lead to partial utilisation of ANC services.

The model in Figure 18 therefore provides important insight into factors influencing pastoralist women's ANC use. The model also provides a conceptual framework to understand and interpret the study findings. The model is presented in relation to its potential implication for policy development in provision of ANC services and future research. Thus, the potential strategies are integrated in the model in the final chapter to show the connection between the structures, mechanisms, and agency to address the events which lead to partial ANC use (see Figure 18). This is in line with the current research aim and the underpinning philosophical assumptions of CR, which suggest that to emancipate and empower the participants, researcher needs to provide potential recommendations to address the social problems identified (Fletcher, 2017).

By illustrating the relationship between structure, mechanism, and agency (see Figure 19), the model can be useful for researchers in planning, advocating, and providing ANC services for pastoralist women in Marsabit County and other related similar settings among pastoralist communities.

The model shown in Figure 18 is related to WHO (2016) guidelines on ANC services delivery, to show the relationship between the expectations of the guidelines and the current study's findings in the next sub-section.

Figure 18: A model of partial utilisation of ANC amongst pastoralist women



6.6.2. Relationship of ANC partial utilisation model with WHO guideline on ANC

WHO (2016) guidelines on ANC services recommend a minimum of eight contacts, with the first contact initiated at 12 weeks to reduce perinatal mortality and enhance positive pregnancy experience. The guideline complements the existing WHO model (e.g. FANC model). At the time of this study's data collection, the FANC model was in use, which was not fully, as evidenced by participants' accounts. Although countries were to tailor WHO (2016) recommendations to their individual contexts, the current study's findings demonstrated that ANC provision in the studied area was

predominantly provided in centralised structures (static health facilities). This model of service delivery failed to reflect the reality in the context of pastoralist communities, particularly those related to their nomadic lifestyle, providing little opportunity for accessing ANC clinic and to comply with WHO guidelines. This was reflected in how participants (women, men, TBAs, and nurses) overwhelmingly expressed the need for outreach mobile services and awareness.

The current model suggests the need for mobile outreach services that include comprehensive ANC services packages and awareness of the importance of ANC. The WHO (2016) model emphasises context-specific recommendations. Since the current study findings demonstrated the pastoralist way of life and other contextual factors (e.g. distance) as key challenges for women to use centralised healthcare services, the focus of ANC services provision should consider their context. In this regard, the current study's suggestions are illuminated in Figure 19 and are discussed in chapter eight. The recommended strategies align more with components of the WHO (2016) recommendations on ANC for positive pregnancy experiences, particularly community-based interventions.

The WHO (2016) model also recommended person-centred quality care, which entails effective communication about physiological, biomedical, behavioural, and sociocultural issues that are critical in women's ANC uptake. In the current study, important aspects of care that emerged were limited information sharing, resource limitations, and the task-oriented model of care rather than a person-centred model. The current study has established that more often the type of care provided focused on essential clinical interventions (foetal heart monitoring, blood test for disease, particularly HIV, provision of ferrous and iron tablets, and monitoring weight), with less focus on individual women's psychosocial needs or those related to the WHO (2016) model. Although, the interventions mentioned above are part of the WHO guidelines and are important, the psychosocial and information needs of women were missed in the current study. Thus, the model of partial utilisation of ANC suggests the need for health promotion, as discussed later.

In addition, provision of maternal healthcare, including ANC, involves a diverse range of other activities as per the WHO (2016) model, including healthcare providers' relationship with the women, which is critical in the provision of care and which strongly influences maternal health outcomes (D'Ambruoso et al., 2005, Srivastava et al., 2015, Yakong et al., 2010). These include information sharing, the need for privacy, and healthcare providers' competency, trust, and support, all which were identified in the current study. In this study, the relationship and trust between the nurses, women, and TBAs was indicated to influence ANC service use. Thus, the model recognises the need to consider these issues, by suggesting the need for programmes such as continuous education and skills update to improve nurses' competency, provision of privacy, and need for information sharing, as well as addressing relationship issues in terms of trust with personal information.

Based on the current study's findings, the main suggestions proposed to address the gaps are the need for provision of services closer to the villages, the need for health education and information sharing, and community empowerment and engagement, and policy development, as discussed in the final chapter.

6.7. Chapter summary

This chapter demonstrates the interaction of structures and mechanisms that influence women's ANC use from across all groups. Community in transition is a significant finding that shows the community is trying to integrate to modern health system as influenced by government policy. However, without provision of supportive infrastructure to make access possible, this transition process cannot be full realised. This implies the need for strategies to enhance utilisation of the ANC services for pastoralist women to integrate into the mainstream Kenyan healthcare system, and to appreciate and experience WHO's (2016) recommended eight contacts for positive pregnancy experiences. Context-specific strategies would be particularly important given

that the women in Marsabit County experience the highest maternal morbidity and mortality and low ANC attendance among Kenyan Counties.

Next, the findings are discussed as pastoralist community use of ANC is understood as partial, under two key headings: (i) initial access, and (ii) delays, uptake, and subsequent ANC use. The discussions will be situated within the model alongside existing literature.

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CHAPTER 7
DISCUSSION OF FINDINGS

7.1. Introduction and overview of key findings

The primary aim of this thesis was to explore the perspectives of pastoralist women and other key stakeholders on factors influencing ANC experiences. Observations were conducted during ANC consultations to examine the interactions of nurses and women and how that influences ANC experiences. The study identified that this community is in transition, and while there is an element of ANC use, it is partial. This partial utilisation of ANC is a novel finding, explained by illuminating two key causal mechanisms that influence pastoralist women's ANC experiences and health-seeking behaviour. Considering the initial research question (barriers and facilitators to ANC use), this new proposition is then discussed alongside existing literature and particularly a recent Cochrane qualitative review (Downe et al., 2019) as a new way of understanding ANC use as 'partial'.

The thesis provides insight into six key issues that shapes women ANC use. The first key findings relate to the impact of government policy that attempt to facilitate access. These include:

(i) The need for and the benefits of the handbook.
(ii) TBAs' roles as referral agents.

These findings demonstrate how the government applies its power[9] to influence pastoralist women's ANC use.

The second major findings relate to the complex interrelated structural barriers in women's social settings and larger Kenyan healthcare system that lead to

[9] Power means ability to produce or achieve a specific outcome or goals, where authority, or influence is exercised (Oudshoon, 2005). In this study power refer to government influence over women's use of ANC clinic.

delayed initial access, uptake of interventions, and subsequent ANC use. These include:

(iii) Difficulties of pastoralist lifestyle and infrastructural challenges.
(iv) Social exclusion for women with out of wedlock pregnancy
(v) Health system limitation and women's ANC experiences
(vi) The nature of relationships and a gap in information sharing.

The findings also provide a new insight that the pastoralist community is a transitional one, where both traditional and modern forms of care co-exist to influence care during pregnancy and childbirth, but there is element of gradual shift from traditional to contemporary care. The discussion on community in transition is woven across the key findings discussed in this chapter.

This thesis argues that even though the government strategies influence ANC use, this may not be possible always for all women, particularly in the context of their pastoralist lifestyle. These multiple structural barriers impede the transition, leading to delays in initial access or failure to return for subsequent visits, and/or expectations not met. Therefore, it can be argued that the same power (government policy) can be oppressive if mechanisms to address barriers are not provided, yet women are expected to use the services. In this context, failing to recognise the factors that may have led to non-attendance or not maintaining regular visits. The dissonance between the government policy and structural barriers is the the underlying cause of partial utilisation of ANC. This is the original contribution of this research demonstrating factors that influence pastoralists' women's health-seeking behaviour with specific reference to ANC.

The 2019 Cochrane qualitative synthesis on provision and uptake of routine ANC services stated that women's initial access and subsequent use of ANC is influenced by experiences of good quality and respectful care, which positively influences continuity with the care (Downe et al., 2019). My study

affirms the review's findings, but also highlights new findings that are specific and unique to the pastoralist context in Kenya. These include women's pastoralist lifestyle which has a significant impact on the use of ANC services, cultural beliefs about out of wedlock pregnancy, influence of government policy on utilisation of ANC as manifested in the community's desire to have the handbook (as it serves as a gateway to many other benefits, including immunisation for the child, and enrolment in school), and community in transition. Also, my study points to the changing, yet still critical roles of TBAs in the use of ANC services.

Other findings in my study include resource limitations, gap in information sharing, geographical access, socio-economic factors, some cultural practices and confirmation of foetal position have been documented across Africa in the area of maternal health, including ANC services delivery (Kea et al., 2018, Lowe, 2017, Munguambe et al., 2016).

The next section discusses the findings in depth within the model of partial ANC use.

7.2. Initial access and ANC use

The discussion in this section relates to the events that facilitate the initial ANC visit. Initial access in this context refers to the first visit to ANC, and the events and contextual factors that made the visit possible. The pastoralist community accounts suggest that the government policy played important roles in influencing ANC service utilisation through: (i) positioning the handbook as a key mechanism that facilitate social inclusion and access to a range of government services; and (ii) through re-framing TBAs as conduits between community and by promoting their role as referral agents. These strategies led to changes regarding health-seeking among pastoralist women, which are manifested in gradual acceptance of contemporary healthcare practices, as described in section 6.3. The discussions in this section relate to the study's original second research aim about the facilitators of ANC.

7.2.1. The need for and the benefits of the handbook

The findings in this study revealed that the handbook connects the community with mainstream government structure to access government services. It also appeared as a potential mechanism for the government to promote health, given its information content. Recognition of the handbook as an important document by the community signifies a desire for social inclusion, extending to a general citizenship rights (e.g. to obtain a birth certificate for enrolment in school), and a desire to connect with mainstream government services (e.g. to access other healthcare services, including childhood immunisation). This demonstrates that the handbook is a symbolic tool for health service access, social and economic transition for a pastoralist community into a mainstream Kenyan health system. However, it is important to note that the handbook is not a pathway to gaining citizenship, but birth notification which is required later to obtain a birth certificate. According to Kenyan Constitution, a child has right to Kenyan citizenship by birth and cannot be simply determine by the handbook.

As asserted in Downe et al.'s (2019, p. 23) recent Cochrane qualitative review, in some African countries the ANC card (the handbook) was viewed as a '*passport*' to accessing hospital during an obstetric emergency, or for admission into the hospital during childbirth. The current study demonstrates that this is certainly true in relation to ANC and postpartum care service access among pastoralist community. Besides extending Downe et al. (2019) finding on the ANC card (the handbook), the current study has added a few new insights about the handbook as a 'passport' to accessing government services. This include its role as a gateway to obtaining referral letters in case of pregnancy-related problems that requires further management, accessing childhood immunisation, nutrition, and child welfare support and a gateway to general citizenship rights (e.g. obtaining a birth certificate), which is later necessary for enrolment at school. For women in this study the latter was the most common priority. This suggests that the handbook plays a critical role in

pastoralist women's use of ANC services not because of its intrinsic value (e.g. in terms of ANC health information), but due to its ancillary benefits relating to their need for social inclusion (of their children) through education, as well as other healthcare services (e.g. immunisation and referral). As demonstrated in the current study, Downe et al. (2019) reported that some women placed value on visiting the clinic only to obtain the card for access hospital during childbirth, but not for the importance of ANC itself. However, the need for the handbook as a 'passport' to hospital delivery was not a main priority for women in the current study as reported in the review. This could be possible as existing evidence shows that almost 80% of the women in Marsabit County have their childbirth at home (CIDP, 2018, KDHS, 2014). Equally, Caulfield et al. (2016) indicated that culture, distance, and knowledge influence pastoralist women's decision for home delivery, similar factors influence ANC access in the current study. Nonetheless, the handbook acted as a 'passport' to other government services as mentioned above.

For the pastoralist women in the current study, the importance of the handbook was limited to its practical benefits as information related to pregnancy was not mentioned by them, suggesting that the handbook is underutilised in relation to its health educational benefits. Conversely, studies from Asian-pacific countries (e.g. Indonesia, Japan, Mongolia, and Palestine) documented several health-related benefits of the handbook to the women during intrapartum and postpartum, and its influence on health-seeking behaviours, as related information was provided by health care providers concerning such benefits of the document (Kitabayashi et al., 2017, Mori et al., 2015, (Osaki et al., 2019), (Kitabayashi et al., 2017, Mori et al., 2015, Takeuchi et al., 2016). The handbook was also established as a tool for recording health information for clinical decision making, monitoring attendance at ANC, recording services provided, guiding in health promotion, monitoring maternal physical and mental health, and facilitating communication with families.

Consistent with Downe's et al., (2019) Cochrane review, the current study did not identify the handbook as having an impact on subsequent ANC use, rather

it was mainly related to the initial ANC visit. Therefore, there is a need for effective use of the handbook, as understanding the educational benefits of the handbook have an impact on subsequent visits. This was established in recent cluster randomised controlled trial in rural Indonesia, which associated the knowledge gain from the handbook with subsequent ANC visits, uptake of interventions, skilled birth attendance, and postnatal care (Osaki et al., 2019). However, in the current study little was done by the nurses to foster provision of health information to enhance ANC uptake, as women reported the struggles, they faced to make sense of information in the handbook and having to rely on intuitive guesswork. Two recent systematic reviews highlighted the handbook as an important tool that improves the interpersonal relationship between women, nurses, and caregivers. It was established that the handbook increased a sense of connection between women and nurses, improved communication and personalised care to the women, acted as communication tool for less-educated women and first-time mothers and their husbands, and brought behavioural changes towards pregnancy and childcare (Pratiastuti and Ahmad, 2018).(Pratiastuti and Ahmad, 2018) further added that the husband's participation in pregnancy care, childcare support, and childbirth improved after reading the contents of the handbook. It was then suggested that the effectiveness of the handbook could further be enhanced if the health care providers made proper use of it. Additional benefits of the handbook include influencing family members' beliefs, such as negative perceptions about pregnancy and childcare among mothers-in-law (Hagiwara et al., 2013). All these benefits suggest that the handbook has an influence on the social system (e.g. women, husbands, and other family members) in regard to ANC services uptake. None of these benefits were identified in the current study, except for the practical benefits (e.g. perceived and actual). This implies the need for mechanisms to make the handbook more useful in regard to its health information benefits, to address the unique challenges of the women in this setting, as discussed in the final chapter.

Additionally, many women in this study did not appreciate educational value of the handbook, mainly due to limited understanding, exacerbated by widespread illiteracy among them (CIDP, 2018, KDHS, 2014) and further compounded by nurse's failure to provide explanation of educational meaning of the handbook. Similarly, findings from developed countries like the USA noted the limited benefits of the provision of many copies of booklets and leaflets during ANC clinic without accompanying explanation of the contents, which causes dissatisfaction with health care providers (Kraschnewski et al., 2014). Situating the current finding within the context of a developed country like the USA, it can be argued that to some extent health care providers' failure to help women meet their health information needs during pregnancy is a global concern. Hence, there is a need for service providers to understand the significance of providing explanations of the services they provide to promote optimal ANC use and outcomes, even for those who may have access to other sources of information and can read and understand, as in the case of women from the USA. Nonetheless, several factors could be underpinning the health care providers' failure to provide adequate information, particularly in the African context (Yakong et al., 2010), as discussed in section 7.3.

While the need for the handbook in current study is strongly linked to future benefits for the unborn child, particularly immunisation and schooling, a study in Kenya by (Mudany et al., 2015) pointed out what actually led to the distribution of the handbook across the country. The study piloted uptake of the handbook by assessing infants diagnosed with HIV, and the results showed a significant increase in the number of infants tested. This positive development led to the handbook being distributed across the country. Equally, in the current study, HIV testing is a component of the handbook, and all the women are tested for HIV during the initial visit, but women seemed not to understand this aspect related to health benefits for both the mother and the child. Instead, women were more concerned that without the handbook their children might not obtain the birth certificate to enrol in school. This important aspect of the need for the handbook reaffirms its role as a document

that allows social inclusion, hence influences attendance at ANC for pastoralist women.

Similar findings on maternal and child health benefits were documented in Japan (Nakamura, 2010), but not on need for social inclusion. From these two studies from two different contexts, the handbook demonstrably facilitated continuity of care from pregnancy through to the early years of a child's life (0-6 years), this influenced women in the current study to make effort to obtain the handbook. Thus, the handbook became an important incentive for both the mother and the child for health surveillance, hence influencing the utilisation of maternal healthcare during pregnancy and postpartum. For pastoralist women in the current study, there is a need for awareness on the usefulness of the handbook as opposed to commonly held beliefs, so that its benefits are maximised also during pregnancy.

It was also interesting in the current study that most of the participants related the incentivised approaches of ANC to nurses/government strategy to make attendance at ANC possible. Therefore, it is plausible to conclude that the government's intention was to enhance attendance at ANC in line with the global policy on ANC (e.g. the WHO guideline of four ANC visits). However, consistent with findings from Kenya and the USA, incentivised approaches such as giving porridge, maternal gift packs and vouchers had a limited impact on women's ANC use and sustained subsequent ANC visits (Fleming et al., 2017, Ngoma-Hazemba et al., 2018, Laken and Ager, 1995). As in the current study, both of these studies attributed access barriers such as distance, quality of services, lack of knowledge and lack of means of transport as partly contributing to failure to sustain subsequent visits.

The current study has also established that it might take elders' negotiation for women to access postpartum services if ANC clinic was not attended to obtain the handbook, or the woman delivered at home. With this kind of rules, almost

all women in current study reported attending ANC to obtain the handbook as an identifier of clinic attendance. To some extent, this finding reflects what was found in Zambia, where chiefs instituted penalty fees for women who failed to use maternal healthcare services during childbirth, although it did not strongly influence family's decisions to use health facilities (Ngoma-Hazemba et al., 2018).

These findings demonstrate that while the condition by nurses to get women to attend ANC clinics seems to work in the short run (at least initial visit); it reflects a dissonance between policy and context but more importantly is short-lived and not an empowering strategy. Thus, the findings suggest three fundamental arguments in the context of ANC use. First, the finding suggests that nurses failed to consider contextual factors such as geographical barriers (e.g. distance) and lack of knowledge, which have contributed to a failure to accessing ANC clinic. Secondly, it is also possible that nurses downplayed women's power to make decisions on when to attend ANC based on their context and ability. Thirdly, nurses could be aiming to achieve the required policy guideline on attendance (e.g. four ANC visits), as was observed during ANC consultation, where nurses emphatically encouraged women to return for the subsequent visits.

From previous studies and the current study, it can be concluded that the handbook is a useful tool that influences utilisation of maternal healthcare services, including ANC. Unlike the current study's findings where the handbook only influenced initial visit, previous studies have demonstrated critical roles of the handbook in enhancing continuity with care, behavioural change and maternal healthcare service uptake in general. It can therefore be argued that, if effectively utilised, the handbook may have positive impacts on social systems (e.g. women, husbands, and communities) regarding knowledge of ANC, which in turn will enhance effective uptake and subsequent ANC use among pastoralist women. Therefore, its usefulness can be

optimised for the pastoralist women in the current study not only from its practical perspectives, but also its educational roles. Hence, there is need for adequate information, education, and proper communication about the full benefits of the handbook to empower pastoralist women, as this seemed a missed opportunity for most of the women in current study to exercise their agency regarding utilisation of ANC.

In this regard, a recent systematic review from three countries (Burundi, Mongolia, and Palestine) found positive effects after the handbook was translated to the local languages, with illustrations that made the usage more relevant for less educated women (Pratiastuti and Ahmad, 2018). In addition, a study in Kenya also suggested need for the handbook content to be translated from English into indigenous languages or Swahili to have an impact on women's knowledge and uptake of ANC interventions (Kawakatsu et al. 2015). This strategy is further expanded in the final chapter.

7.2.2. TBAs' roles as referral agents

The findings in this study revealed that the roles of TBAs shape and contribute to women's ANC access and use, although there are also ambivalences regarding their changing roles. The findings also demonstrated that TBAs' roles are in transition to contemporary care, mainly due to government influence on their roles through training and incentives to act as referral agents, instead of exclusively providing traditional pregnancy care at home. Supporting this finding, existing evidence shows that TBAs' training, knowledge gained, and incentives contributed positively to maternal healthcare service utilisation and pregnancy outcomes as a result of their roles of provision of health education, referral, and management of pregnancy (Sarmento, 2014, Pyone et al., 2014, Wilunda et al., 2017). Similar to the current study's findings, this knowledge is also linked to basic training provided by government/NGOs on the importance of maternal healthcare service use during pregnancy and childbirth (Pyone et al., 2014, Saravanan et al., 2011). This suggests significant roles of NGOs in the provision of maternal healthcare

services delivery in rural communities (Das, 2016, George et al., 2018, Saravanan et al., 2011). It also demonstrates the critical roles of TBAs in rural settings in connecting communities with healthcare services, as government/NGOs recognise and support their roles.

However, while Anono et al., (2018) and Pyone et al., (2014) reported that TBAs provided health education to women on danger signs of pregnancy and complications, this was not clearly established in the current study, as women seemed not to understand the roles of TBAs and CHWs in relation to the provision of maternal health knowledge. This limitation could be explained by unclear role definition for TBAs and CHWs in the community regarding health information sharing as TBAs reported their roles as mainly referral agents. Although CHWs were not interviewed in current study, their presence in the community was noted during data collection and women mentioned about their roles in relation to much emphasised children immunisation campaign. Ensor et al. (2014) argued that provision of educational interventions using community-based health workers is an effective means of improving maternal health knowledge. Therefore, redefining and reviewing the roles of CHWs, and encouraging the roles of TBAs beyond surveillance and referral to include health promotion, might increase women's ANC knowledge and influence sustained ANC service use. This would be significant for pastoralist women's utilisation of ANC, as TBAs are mostly based in the community and CHWs travel to the villages more often, thus empowering them would likely be conducive to better utilisation of existing human resources. This finding has implications for task-sharing policy guidelines (TSPG 2017-2030) in Kenya that aim to address human resources challenges through the deployment of lay workers such as CHWs to promote health education and connect rural communities with health systems (Ministry of Health Kenya, 2017). Task shifting is also an important component of WHO recommendations on positive pregnancy experiences through involving community-based lay workers (WHO, 2016).

The current study draws attention to the need for referral not only for skilled birth attendance but also during pregnancy. This is attributed to a lack of knowledge, shyness due to early marriage at a young age, and cultural practices about out of wedlock pregnancy, all contributing to delay ANC visits, hence the TBAs link women with ANC services, with the exception of those with out of wedlock pregnancy, which they reported avoiding due to cultural factors. Early marriage among pastoralist communities is a common practice (Kirupi and Ridgewell, 2008), suggesting the need for support. This finding on need for referral during pregnancy, in particular in early marriage is unique, as little is mentioned on need for referral for ANC clinic in previous studies. Many studies in Africa have documented community views about TBAs' role in rural community that mainly focuses on the referral need for skilled birth attendance (Chi and Urdal, 2018, Kitui et al., 2013, Pyone et al., 2014, Vyagusa et al., 2013, Wilunda et al., 2017).

Besides linking women with healthcare during pregnancy and childbirth, TBAs in this study play significant roles providing traditional pregnancy care services. This is because all TBAs lived in the villages, and their services are readily accessible, thus influencing women's health-seeking behaviour. In this context also, despite recognising their referral roles, most of the nurses distinctively acknowledged TBAs' critical role in pastoralist communities. In line with the current study's findings, studies in Kenya and other African countries agreed that TBAs are significant community own-resource persons (Ana, 2011, Kaingu et al., 2011, Mahiti et al., 2015). Caulfield et al. (2016) study in Kenya further added that TBAs occupy *'a prestigious place in pastoralist communities'* (p. 8). These roles of TBAs in the community explain the main reason the government trains and incentivises them to act as a conduit between communities and the national health system. However, the context in which they provide traditional roles apart from expected referral roles must be taken into consideration, including socio-cultural, economic, and community settings, health system constraints, political influence, and social responsibility (Kaingu et al., 2011, Pyone et al., 2014, Wilunda et al., 2017). For example, Wilunda et al. (2017) argued that the inconsistency of incentives

and lack of resources affected continuity with expected referral roles, while women's socio-economic status further influenced compliance with referral advice (Sarmento, 2014, Wilunda et al., 2017). Although affirming most of the findings from these studies, the current study added that inconsistency with incentives was not a barrier for TBAs' referral roles, as they felt morally obliged to continue playing their referral roles.

A significant finding about TBAs' roles in the current study is their practices of antenatal abdominal massage (AAM). As explained in chapter five, (section B,5.2. B), this practice is perceived to have preventative roles during pregnancy and childbirth, such as correcting foetal malposition, aiding mobility, relieving pressure pain, and easing labour progress, and hence women seek such services from TBAs. This finding has not been reported in previous research, hence provide a new insight about roles of TBAs in the community. Further research is required to gain better understanding of impact of this practice on women's health-seeking behaviours during pregnancy. However, qualitative studies in Africa indicated in general that women consult TBAs because of their experiences, positive attitude to women and knowledge that relate to community culture and practices about pregnancy (Cheptum et al., 2016, Dako-Gyeke et al., 2013, Kaingu, et al., 2011). Similarly, Rudrum (2016) asserted that some TBAs started their traditional pregnancy care roles as adolescents, making them feel very experienced in their roles. This was clearly demonstrated in current study as most of the TBAs indicated that they have wealth of experience on traditional pregnancy care (e.g. over 35 years in one case). Based on the current study's finding and previous studies, it can be argued that many years of experience and confidence in their roles explain why women seek their services, which also impacts on healthcare service use (Ana, 2011).

Nonetheless, despite perceived skills and many years of experiences, TBAs in current study reported abiding by the government policy of referral of women to healthcare during pregnancy. TBAs believed that contemporary pregnancy

care is a safer and better option, as corroborated by Wilunda et al. (2017). This explains shift in role of TBAs from traditional birth attendants to promoters of contemporary care. Therefore, it can be argued that by adopting both forms of pregnancy care (traditional and contemporary), TBAs are attempting to continue to preserve their traditional practices and skills, without conflicting with the government policy on referral of women to maternal healthcare services. This demonstrates TBAs exercises their power to deal with expectations of their roles in both contexts (traditional and contemporary). These findings confirm the need for policies and programmes that should recognise the important roles TBAs play in the rural community and the need to empower them consistently, to link women with healthcare services during pregnancy, as some seek need recognition of their roles.

Despite the significant contributions of providing pregnancy care highlighted in previous studies and acknowledged in the current one, TBAs' roles have increasingly generated heated debate among health professionals and international health agents (Ana, 2011). Many governments, including Kenya, have attempted to abolish their traditional role of pregnancy care, and to replace it with promoting birth-preparedness, early identification and referral of complications, postnatal care, and registration of births (Chi and Urdal, 2018, Reeve et al., 2016, Turinawe et al., 2016). However, agreeing to some extent with the current study's findings on the need for TBAs, WHO suggested that due to TBAs' important position in the community, they should be considered important companions in the provision of health education, social support, and linking women with the formal health system (WHO, 2010). This is important in the current study, given the community's pastoralist lifestyle.

Based on previous studies' findings and those of the current study, it can be argued that the availability and ease of accessing TBAs services in the community, coupled with their many years of traditional pregnancy care experiences, the pastoralist lifestyle of this community, and deficiencies in the health system, suggest that TBAs are needed and play critical roles in the

community and at influencing healthcare service use. As such, although TBAs' changing roles of connecting women with healthcare services is important, their traditional roles would continue to persist, particularly in rural settings. Therefore, it is plausible to conclude that policy on abolishing their roles remain ineffective as they failed to address why TBAs' roles continue to prevail in such settings (Dako-Gyeke,2013, Sang et al., 2017, Turinawe et al., 2016). This implies that when policies (e.g. referral to healthcare) are implemented without provision of supportive prerequisite infrastructure while simultaneously discouraging TBAs' roles (Turinawe et al., 2016, Reeve et al., 2016), this will remain counterproductive in this pastoralist community, leading to partial utilisation of maternal healthcare services including ANC. In the meantime, the health system should continue to collaborate and provide support for TBAs' changing roles, including re-training to improve their skills, and roles to include provision of health education at the village level and other services in the community.

The current study has established that women's capabilities to access ANC and follow government policy are significantly challenged by multiple factors within their settings, as reflected in the next sections.

7.3. Delays, uptake, and subsequent use of ANC

The discussion in this section relate to participants' views about key causal structures that impede or delay initial access, uptake of ANC services and/or delays, or inhibit subsequent ANC use. While previous discussions in section 7.2 relate to the research question on facilitators for ANC, this section responds to the research question on barriers to ANC use. These barriers stem from context-specific causes, and included: (i) difficulties of pastoralist lifestyle and infrastructure challenges; (ii) social exclusion for women with out-of-wedlock pregnancy; (iii) health system limitations and women's ANC experiences; and (iv) the nature of relationships and a gap in information sharing. These factors not only relate to the number of visits, but the quality of the care provided, whereby women may make effort to access health facilities

but their experience of being provided inadequate services leads to the decision not to return for subsequent visits.

7.3.1. Difficulties of pastoralist lifestyle and infrastructure challenges

This study has established that multiple factors shaped women's ANC access during both initial and subsequent visits. The key issues include pastoralist lifestyle, distance to health facilities, socio-economic situation, availability and cost of transport, geographical barriers, and inaccessible roads and motorised transport. As established in the current study, and documented in studies in Kenya and other African countries, access to healthcare is an overall challenge for rural residents due to such factors (Assefa et al., 2018, Biza and Mohammed, 2016, Do et al., 2017, Ogundairo and Jegede, 2016, Sharma, 2016, Wako and Kassa, 2017). However, the uniqueness in the current study was demonstrated in the community's pastoralist way of life. These included challenges that come with their mobility, culture, and daily activities related to their animals' needs, which presented more pronounced challenges for pastoralist women in terms of initial access and subsequent engagement with ANC clinic. Factors related to pastoralist lifestyle also affect the supportive roles of other stakeholders (including men and TBAs).

The finding on the pastoralist lifestyle is new and a unique finding in the current study, not mentioned in previous research, hence original contribution. The key issues relate to the impact of the pastoralist lifestyle on women's ANC access, including daily roles of animal management, their migration pattern, and socio-economic challenges due to persistent droughts and food insecurity. In addition, the community cultural practices of early marriage and culture related to out of wedlock pregnancy influence ANC access.

The current study has provided insight that the relationship of women with their livestock affects their ANC experiences. In this context, women's priority was

first to meet their livestock's needs before finding opportunities for ANC clinic attendance, as they reported that their animals are their means of livelihood. In this regard Huka et al. (2001) noted that pastoralist communities consider their animals as their property and means of existence, while Kirupi and Ridgewell (2008) added that they organised their life around the needs of their herds. This explains the tight relationship of the pastoralist communities with their animals, which affects their health-seeking behaviour in terms of both initial access and subsequent use of ANC services. In addition, as explained in section 6.5.1, pastoralist women are also overburdened not only with their household roles and responsibilities, but the duty of managing livestock, particularly during dry seasons when men travel further afield with the larger herds in search of pasture and water. This diminishes women's agency to initiate ANC early and to sustain subsequent visits. Previous studies in Kenya and other developing countries have also exemplified that responsibility to fulfil requirements for daily living, including household chores, limit poor women's agency and capabilities to access healthcare services (Caulfield et al., 2016, Choudhury and Ahmed, 2011, Killewo et al., 2006). This implies the need for strategies to empower women to have an opportunity to access healthcare services, and consideration for context-specific strategies.

Pastoralist women's periodic migration with herds to meet nutritional needs (e.g. milk from animals) or herding is another significant finding in this study that led to delays in initial ANC access, non-attendance, or failure to return for subsequent visits. Thus, pastoralist women's regular ANC services use is inhibited, as also evidenced by the observational data which showed that most ANC services are organised and delivered in a centralised (static) health facility. This finding is critical given WHO recommendations of a minimum of eight contacts with health care providers (WHO, 2016). Based on this finding, it can be argued that if the current four visits (FANC) is proving difficult for women, this, therefore, indicates that in the context of pastoralist communities, it will be much more difficult to achieve new WHO guideline of eight contacts unless a context-specific approach is adopted. Supporting current study's

finding and argument, Jacobs et al.'s (2018) study in Zambia found that women from remote and poorer settings attended ANC only once, and they suggested the need for comprehensive healthcare services during this pivotal visit, which they termed a 'one-stop-shop' (p.9). This approach involves provision of all available services during the first visit, as women may not return for the subsequent visits. It can be argued that such a '*one-stop-shop'* approach could be the ideal approach for pastoralist women, subject to the improvement of services including resources, adequacy of information, and availability of nurses at the dispensaries.

Also, health and economic empowerment of pastoralist women might help women to access healthcare services instead of migration with animals due to food insecurity and missing out on ANC appointment. A case controlled trial in Kenya supported this argument, stating that strategies such as belonging to women's groups and health information sharing (e.g. CHWs invited to provide health education in group forum), shareholding through table banking, access to loan services, and members' support for each other to seek healthcare services provided women with economic stability and improved health outcomes in pregnancy (Christoffersen-Deb et al., 2015). Furthermore, WHO recommendations on ANC for positive pregnancy experiences also affirm that to improve maternal and foetal health, community mobilisation is critical through facilitated participatory learning and action cycles within women's groups, particularly in rural areas (WHO, 2016). Therefore, it can be concluded that given the low socio-economic situation of pastoralist community, further compounded by persistent drought situation that threatens their means of livelihood (animals), and a lack of stable income for both men and women, economically empowering women not only improves potential for ANC uptake, but also their health status during pregnancy. This may in turn address the issue of food insecurity, which leads to migration with livestock, and missing opportunities for attendance at ANC. Also, provision of health education is important as women's knowledge is limited, influencing ANC uptake. This finding on pastoralist lifestyle has significant policy implication in terms of ANC

services organisation and delivery of context-specific services, this will be expanded in the final chapter.

As earlier discussed in the literature review, husband's knowledge and participation during ANC significantly influence women's ANC access and use. The current study has established that the pastoralist lifestyle of migration with animals, cultural beliefs related to gender roles, and a lack of knowledge comprised barriers to men's involvement during ANC clinic and the provision of support with domestic roles. Existing studies in Kenya and elsewhere in Africa have highlighted these barriers (Ghose et al., 2017, Kwambai et al., 2013, Nesane et al., 2016, Lowe, 2017, Yargawa and Leonardi-Bee, 2015), but not those related to the pastoralist lifestyle. Hence, this is a new finding, suggesting the need to explore strategies to engage with pastoralist men to increase their awareness and roles in ANC, given that women are reported as overburdened, which restricted their regular ANC use. However, in the current study husbands' absence did not act as a barrier for women to access and use ANC, as was the case for women from Rwanda and Malawi, where locally formulated by-laws made presence of partners a mandatory requirement for women to access ANC services (Mamba et al., 2017, Pafs et al., 2015).

The current study has established that the telecommunications network is a key challenge for pastoralist communities to link with healthcare. For instance, the majority of the TBAs expressed facing challenges contacting HCPs when faced with pregnancy-related problems, with some mentioning *'going up a hill'* to explore available telephone network connections to contact health care providers. As earlier discussed, TBAs are expected by the government to link communities with the health system, however with such challenges their power is diminished. This again explains the dissonance between the policy (e.g. expected referral roles) and context in which ANC service is provided. In this regard, previous studies across Africa and other high-income countries have documented the benefits of strategies such as mass media (e.g. radio programmes) and mobile technology to have positive outcomes in term of information uptake, communication, and behavioural change, leading to

positive pregnancy outcomes (Entsieh et al., 2015 Feroz et al., 2017, McNabb et al., 2015, Lund et al., 2012, Ngoma-Hazemba et al., 2018, Serbanescu et al., 2019).

For example, in Ghana, through a mobile application called 'mobile midwife', midwives provide advice to pregnant women in local languages through text messages and short calls, which demonstrated improved understanding of the importance of seeking advice from health care providers on pregnancy care and child health issues, leading to better pregnancy outcomes (Entesieh et al., 2015). In fact, a Lancet series document on next-generation maternal health by Kruk et al. (2016) suggested that use of innovations such as Universal Health Coverage (UHC), and data and communication technology have immense potential to change maternal health practices for better in the next 15 years. Therefore, in the current context, such innovations, in particular mobile technology application, whereby women receive short calls on health messages from the health care providers would have a positive implication on ANC uptake and improved pregnancy outcome for pastoralist communities. In this context also, such innovation would have potential for communicating with TBAs and CHWs who link communities with healthcare facilities. In a similar manner, the strategy would have potential to reduce barriers to equitable healthcare access pastoralist communities experiences (Downie, 2011, Nyariki and Amwata, 2019, Schelling et al., 2008). The strategy is also critical given the multiple access challenges they face, including their nomadic lifestyle, and high maternal morbidity and mortality (see section 1.2.1). This approach could also supplement the earlier discussed approach of a *'one-stop-shop'*.

Need for mobile outreach services was strongly recognised in this study to address the challenges of long-distance travel, which is a key inhibitor of attendance at ANC. Supporting this finding, Neke et al. (2018) and Yu et al. (2017) argued that mobile outreach clinics for hard-to-reach areas and vulnerable groups is critical in the provision of services, and had the potential for increased utilisation of maternal healthcare services and improved health

among the population. A lack of reliable and consistent means of transport is an additional challenge to accessing healthcare services for pastoralist women in this current study. A pilot study that explored the feasibility of contracted transporters to mobilise and transport women using an innovative transport system (including motorcycles and bicycles for hard-to-reach areas) revealed a significant increase of attendance at ANC and skilled delivery in Uganda (Pariyo et al., 2011). Therefore, given the similarity of the context (rural setting), such a strategy might have positive implications for pastoralist women. However, further research is needed to explore strategies that specifically suits pastoralist community way of life through engaging with the community.

Consistent with the current study's finding, Jacobs et al. (2018), argued that distance is not always the sole determinant for a single visit, as women might live closer to the health facilities but fail to recognise the need for ANC clinic. Thus, the next section discusses some of these possible reasons as they emerged from the current study.

7.3.2. Social exclusion for women with out-of-wedlock pregnancy

The current study has established that young women with out of wedlock pregnancy faced a greater degree of social exclusion[10] regarding their pregnancy disclosure, ANC experiences and social support. Other cultural beliefs and practices reported in this study relate to gender roles, effect of medical interventions on the unborn child and the mother (that it might lead to child deformity and ill-health to the mother), culture on food practices, and beliefs about pregnancy being a healthy physical state that warrants little need for healthcare, all of which shape pastoralist women's ANC use. These beliefs

Social exclusion[10] - can be seen as a process in which individuals are detached from their community and from shared values as a result of exclusionary practices of the socially included; as a lack of recognition of basic rights; and as a result of individual choice as well as of institutional barriers and forms of discrimination (Harden et al., 2006 p.5). In this context, social exclusion mainly relates to cultural practices that leads to social isolation, stigma and being out casted due to out of wedlock pregnancy.

contribute to delays, non-use, or inhibit uptake of ANC services. With the exception of beliefs about out of wedlock pregnancy, most of these findings are consistent with previous studies' findings (Finlayson and Downe, 2013, Higginbottom et al., 2014, Munguambe et al., 2016, Roberts et al., 2017).

A key and significant finding in the current study is community's attitudes towards women with out of wedlock pregnancy. Strong cultural beliefs about out of wedlock pregnancy were reflected in participants' hesitancy to discuss the subject, which is a great cultural taboo in Gabra community. However, most of the participants had difficulty providing explanation for the cultural beliefs surrounding social exclusion of women with out of wedlock pregnancy from the community, merely citing '*our culture'* as the main excuse for considering them a 'social outcast'. In Africa, issues related to sensitive topics such as sex, illness, and death are generally passed over in silence, being rarely discussed (Daniel et al., 2007), which was evidently the norm among participants in this study.

Although the exact figure for women with out of wedlock pregnancy is not available in rural Kenya, over 40% of the pregnancies in Kenya are reported as unintended, whether untimely or unwanted, which contributes to delayed attendance at ANC, and higher mortality and morbidity (Mumah et al., 2014). As clearly identified in the current study, pregnancy disclosure and engagement with healthcare service is more challenging for women with out of wedlock pregnancy due to cultural beliefs. In fact, during data collection, a young woman with experience of out of wedlock pregnancy declined to participate in interview at short notice, possibly due to her fear and embarrassment concerning discussing her experience of out of wedlock pregnancy.

The current study revealed that out of wedlock pregnancy is mostly experienced by young women aged below 18 years, and that they avoid public appearance and keep their pregnancy a secret. This relates to fear of community reaction to pregnancy disclosure, the shame of being pregnant

before marriage, rejection, and being considered a social outcast. These factors prevented their engagement with ANC clinic. To further entrench the gender imbalance and inequity in this community, while women are punished for pregnancy out of wedlock ('sins' of being pregnant before marriage), men are untouched. This would have negative implications upon their self-worth, social identity, and social interaction, hence influencing pregnancy disclosure and ANC use. Although no studies have been documented on cultural beliefs about out of wedlock pregnancy, studies in Africa on adolescent experiences of ANC resonate with the current findings (Atuyambe et al., 2008, Exavery et al., 2013, Hackett et al., 2019, James et al., 2012). These studies revealed that adolescent pregnant women faced social embarrassment for early childbearing and had limited access to healthcare services. Besides, they were more at higher risk based on their biological and socio-economic, as well as early pregnancy and childbirth (WHO, 2015b). Similarly, the young woman with out of wedlock pregnancy in the current study displayed similar social characteristics and was more vulnerable than other women, since she was young, unmarried, and abandoned by her family, community, TBAs, and her partner, while again being considered a social outcast. This finding presents a new insight into the psychosocial experiences of women with out of wedlock pregnancy, suggesting the need for comprehensive strategies and programmes that not only address pregnancy care needs, but psychosocial and economic challenges faced by women with out of wedlock pregnancy.

Considering the challenges of women with out of wedlock pregnancy, it can be argued that having community and family support would have enabled young women with out of wedlock pregnancy to access ANC early, however that was not established in the current study. They are thus at greater risk of adverse pregnancy-related outcomes (WHO, 2015a). In view of this, Owusu-Addo et al. (2016) and Hackett et al. (2019) suggested the need for community support, involving family members, and healthcare system organisation on ANC consultations schedules (e.g. separating ANC clinic days) to reduce the social stigma faced by teenage pregnant women, and to encourage ANC use. However, this may become a challenge in this pastoralist community context

for the health system to mitigate potential measures, since little is known about their pregnancy, as they avoided public appearance and social interactions, keeping their pregnancy a secret as much as possible, and delaying ANC access or totally abstaining from it.

In addition, WHO's (2015c) *Global Standard for Quality Health-Care Service for Adolescents* emphasised the importance of community support, information sharing, and counselling services to meet the pregnancy-related needs of adolescents. Although these recommendations may not directly link with out of wedlock pregnancy, they resonate with nurses' accounts of the need for community engagement to support women with out of wedlock pregnancy, and the fact that most of the women who experience out of wedlock pregnancy are teenagers, thus these recommendations are argued as relevant in the current study's context. Also, it might enhance community acceptance of out of wedlock pregnancy and utilisation of maternal healthcare services, given the high teenage pregnancy rate and high maternal mortality and morbidity in Marsabit County (KDHS, 2014, UNFPA, 2014). It is important to note that this did not necessarily mean an increase in out of wedlock pregnancy in the County, but there is a risk associated with teenage pregnancy (James et al., 2012), hence attendance at ANC clinic is critical.

Nonetheless, these findings on out of wedlock pregnancy have two significant implications for service delivery among pastoralist communities. Firstly, there is a need for awareness that young women are a vulnerable group requiring special support, as evidenced in previous literature and the current study. Secondly, there is a need to acknowledge the culture surrounding such practices and the sensitivity to changing community cultural practices. These, therefore, suggest need to identify strategies that empower such women economically, and sensitively engaging with community members to address cultural norms related to out of wedlock pregnancy, to minimise delays to engage with ANC. There is also need for policy to outlaw such practices. This is discussed in the final chapter.

7.3.3. Health system limitations and women's ANC experiences

In the current study, resource limitations at the dispensaries, including the shortage or absence of nurses, and onward referral to distant health facilities were among the critical barriers to pastoralist women's utilisation of ANC clinic. This finding is not restricted to pastoralist communities, as many studies in Kenya and elsewhere in Africa reported health system constraints to be a key limitation of maternal healthcare service utilisation (Ganle et al., 2014, Lang'at and Mwanri, 2015, Mrisho et al., 2009, Mugo et al., 2015, Pell et al., 2013). Although these studies also included nurses' negative attitudes as a barrier, the current study did not identify that as a barrier to attendance at ANC clinic. Besides, the current study further extended findings from high income countries and added that lack of time, shortage of staff, and heavy workloads were the main reasons for not providing individualised care to the women (Heaman et al., 2015). This implies that the challenges related to resources, particularly human resources, are a global challenge that influence utilisation of and satisfaction with healthcare services.

The findings on resource limitations is critical given the Kenya government policy on FMS in all public health facilities during pregnancy and childbirth (MoH, 2015), and the current study's finding on the impacts of government policy on attendance at ANC, yet the resources for the provision of services are limited in public health facilities (Gichuhi and Lusambili, 2019, Wamalwa, 2015). This again shows the dissonance between policy and the realities (e.g. resource limitations) about provision of maternal healthcare services, influencing ANC uptake. This, therefore, imply need for provision of adequate resources to enhance utilisation of ANC services.

Globally, there are dedicated health care providers who show commitments beyond the challenges of their duties (Chen et al., 2004), despite the universal limitations they face in resources. Corresponding, nurses working in rural health facilities are reported as *'enthusiastic'* in their roles, trying all possible means to provide services to women to meet their pregnancy care needs

(John et al., 2018). The current study has highlighted similar commitment and has drawn attention to challenges nurses faced in the provision of services to the pastoralist community, which in turn affects women's ANC experiences and subsequent visits. Observations at the clinics also revealed that only one nurse was working per dispensary per day, and some reported being called late in the night to attend to medical or pregnancy-related emergencies, suggesting profound human resources challenges. This implies that nurses may have the desire to provide adequate services to the women, but the limitations within the health system, which are in general beyond their control, disincentives them and limit their ability to provide adequate services, contributing to underutilisation of ANC. This finding is reflected in prior studies that have shown that despite being the most critical component of health system development, human resources are a major challenge globally (Cheptum et al., 2014, Ganle and Dery, 2015, Jacobs et al., 2018, Matsuoka et al., 2010). Ntoburi et al. (2008) argued that addressing resources constraints without motivational strategies for health care providers and addressing quality is a disservice to the provision of quality services in Kenya. As for the current study, both these issues (e.g. inadequate resources and quality of services) remain key challenges to the provision of services to pastoralist women, suggesting the need for potential strategies to address human resource challenges, as discussed in the next chapter. Similarly, despite establishing TBAs' critical roles of linking women with healthcare services, the current study identified the limitation of resources, including ambulances, or the tedious process of securing one when faced with pregnancy-related complications, thwarts TBAs' efforts, affirming previous research (Vyagusa et al., 2013, Wilunda et al., 2017).

7.3.4. The nature of relationship and a gap in information sharing

This study revealed that despite the community showing a transition to using contemporary care service, as reflected in women's desire for pregnancy-related information, the action of the nurses did not foster that, which

influenced ANC uptake and subsequent visits. Downe et al. (2019) highlighted that the provision of adequate health information about pregnancy would empower and enable women's engagement with ANC clinic. However, in current study, a lack of adequate pregnancy-related information featured almost in all women interviews (see section 4.5.2). This was also confirmed during observations at the clinics, which revealed a top-down style of communication between health care providers and women described previously. In this regard, Miller et al. (2016) and Tesfaye et al. (2018) suggested that respectful care starts with asking women their expectations about the care, educating them, providing clear information, supporting decision making, and involving them in their care to enable women to exercise their agency in the utilisation of ANC.

However, in the current study, despite the relatively low number of participants in attendance at the clinics, the heavy workload, lack of time, and shortage of staff were seen to be the main justification for not finding time to provide individualised care to the women. These findings are not limited to pastoralist women, as many studies from African countries have demonstrated that poor relationships and communication between health care providers and women, and negative experiences led to poor health-seeking behaviours (Ayiasi et al., 2013, Pell et al., 2013, Yakong et al., 2010, Yengo, 2009). Yakong et al. (2010) also added that nurses' attitudes to rural women are often condescending, viewing them as uneducated, and the power imbalance is embedded in nurses' social status, nurses' level of education, and the lack of role models for nurses, and the physical structure of clinics (e.g. limited privacy for women), all of which contributed strongly to poor communication and lack of information sharing. Furthermore, the interviews with the nurses also revealed nurses' perceptions of pastoralist women that could have led to inadequate information sharing, whereby some nurses referred to pastoralist women as '*not serious'*, *'uneducated'*, and *'not used to going to hospital'* (N5). Although conducted over many years ago in Marsabit County, Huka et al.'s (2001) study draw some similar conclusions to the current study, and the work of Yakong et al. (2010), revealing that the '*unsophisticated and simple looking'* (p.6)

nature of pastoralist communities may have led the health care providers to provide them with little attention, contributing to community reluctance to seeking care unless in the case of severe illness. Consistent with the current study's finding, Ogundairo and Jegede (2016) also reported that Fulani women's shyness affected their utilisation of ANC. This may explain the nature of pastoralist community interactions with healthcare services, which influences uptake of health services. It may also suggest why some women failed to seek for clarification on the interventions provided, despite reporting a lack of understanding. As such, Roberts et al. (2015) suggested the need for programmes to improve nurse-women relationships, including professional development for nurses, as well as addressing resource shortages (e.g. human and infrastructure at the facility), as explained in the next chapter.

For the women in the current study, another factor that contributed to delay early engagement with ANC was the fear of HIV testing (i.e. the stigma associated with positive diagnosis for HIV). This was further compounded by a lack of pre-test and post-test counselling services, inadequate information about HIV, and perceptions that HIV testing is a compulsory component of ANC. Indeed, HIV testing was observed to be a required component of ANC and is included in the handbook and all women in attendance for the first visit were tested for HIV, with limited provision for informed consent. Similar findings on fear of HIV testing have been reported in Kenya and Iran (Mason et al., 2015, Oskouie et al., 2017). In addition, the current study established that HIV testing is much emphasised and performed for each pregnant woman with readily available rapid testing devices, unlike blood testing equipment for other serious conditions such as anaemia and malaria. Although this may reflect commitments to HIV testing and management, more often women are referred to a distant health facility for other medical blood tests, and many could not afford the extra journey entailed by such testing. Supporting this finding, Betrán et al.'s (2018) study in Mozambique indicated less attention was given to screening for high blood pressure, proteinuria, and anaemia compared to HIV testing. As also observed in current study, this reflect a

disconnect in policy and practice between the campaigned prioritisation of HIV testing and the more immediate health needs of service users e.g. blood test for anaemia and other medical conditions. Therefore, there is a need for provision of resources at the dispensaries to enhance ANC service uptake.

Mistrust and fear of confidentiality in current study explain why some women failed to share personal medical information (e.g. HIV status) with the nurses, as also reported in previous studies (Evans et al. 2016,Turan et al., 2008). Evans et al. (2016) further suggested that since trust is a major factor in HIV testing process, community involvement and outreach programmes are critical. This is to develop a supportive environment in regard to HIV, while involving the community to create trust in the health system and developing the relationship is an essential process. In the current study, a lack of trust may have an implication on the provision of services, given that most of the nurses in this context are local (some women reported they trust non-locals with their medical information due to fears about privacy if tested for HIV by local nurses), and women's trust in them is critical for ANC service uptake.

These findings suggest a need for effective communication, establishing good rapport and development of strategies that should address both the content and quality of service to promote ANC uptake. For the current study, the quality of care (e.g. lack of information sharing) significantly influenced decision to return and ANC services uptake. Benova et al., (2018) argued that the number of visits made does not necessary imply evidence of the information provided about the content of the ANC services. In view of this, several authors have argued that there is a need for developing indicators for monitoring the content and quality, instead of only focusing on the coverage (Hodgins and D'Agostino, 2014, Jolivet et al., 2018, Moran et al., 2015, Lattof et al., 2020). Furthermore, WHO is increasingly advocating for development of a toolkit to enhance uptake of WHO (2016) ANC recommendations, which should reflect country's specific context factors (Barreix et al, 2020). This would be particularly important for

pastoralist women, given their nomadic way of life and contextual barriers that significantly limit the number of the visits made to the static health facility.

In the provision of healthcare services, previous studies have reported gender as a barrier to attendance at ANC, whereby women reported shyness, shame, and embarrassment of being exposed and examined by male nurses, which can lead to delays in and non-utilisation of services (Maputle et al., 2013, Ogundairo and Jegede 2016, Qureshi et al., 2016). On the contrary, in current study, most of the women did not find gender as a barrier on ANC service uptake, for instance when performing physical examinations (specifically the auscultation of the foetal heart). However, there was uncertainty about childbirth being performed in the presence of male nurses, which was considered an embarrassment. This was not surprising in the current study, given the social context where almost 80% of childbirth takes place at home, assisted by TBAs (KDHS, 2014), and the majority of the TBAs in Kenya are female, which influences women's health-seeking behaviour (Kaingu et al., 2011). Nonetheless, Caulfield et al.'s (2016) study among pastoralists recommended that deploying more female health care providers instead of males might improve childbirth rates in hospitals. This, therefore, suggests that services provision among pastoralist communities needs to be culturally sensitive and acceptable, and there is a need for understanding cultural norms that relate to certain practices in order to enhance attendance at ANC and uptake of services.

7.4. Conclusion

This chapter discussed the findings through the new model of partial ANC use, explaining the factors that influence initial access, and those that influence subsequent visits. It is clear that pastoralist community in this study is in transition, striving to fit into modern healthcare system as influenced by

government policy. A novel and key issue is that women use ANC, although only partially. There is greater desire for social inclusion and need to gain the perceived and actual benefits that comes with attendance at ANC, particularly those related to health assessment (e.g. confirming pregnancy and foetal status), and to obtain the handbook (for future childhood immunisation, education, and social support). However, continuity with the care and the desire for full integration into the modern health system are diminished by structural barriers within their context, including those related to pastoralist lifestyle, the impact of culture on women with out of wedlock pregnancy, and other contextual barriers.

The critical issue is for maternal healthcare services to be brought within their reach, if the pastoralist women were to adhere to WHO (2016) ANC guidelines. Therefore, the conclusion drawn from this study suggests that the obligation for services provision to the community falls on the government. Provision of services could be achieved through advocacy, collaboration, liaising with relevant stakeholders and involving community members on their views about what worked for them to address the specific and unique needs of pastoralist women. The study has significant policy implications in terms of ANC service organisation and delivery for the pastoralist community, as discussed in the next chapter.

CHAPTER 8
CONCLUSION

8.1. Introduction

This chapter is the conclusion of the thesis. It highlights the key contributions that the study makes to existing body of knowledge about pastoralist communities' ANC experiences in Kenya. The chapter also presents implications and recommendations for programmes, the provision of services, policy development, and future research. Finally, the strengths and limitations of the study are pointed out. Figure 19 demonstrates the integration of the suggested recommendations into the model of partial utilisation of ANC.

By eliciting the experiences of a community in a remote, hard-to-reach area, the current study offers a strong basis and a critical need for developing services and policies that should reflect pastoralist communities' ways of life. There is sufficient evident from this research that despite the studied community showing a desire for transition, there are multiple barriers for the community to fully integrate into the modern health system.

The current WHO (2016) ANC guidelines that emphasise on eight contacts with health care providers for positive ANC experiences is a major challenge for the pastoralist community and local healthcare providers. Thus, the programme and strategies designed to reach-out to pastoralist women should consider their context-specific challenges. In their study on giving patients a voice in sub-Saharan Africa, Bedwell and Lavender (2020) argued that in order to link health needs with the relevant research, patient and public involvement (PPI) is critical. Equally in the current study's context, involving the community in programme design and policy formulation is argued as important to ascertain what matters to them in regard to ANC service delivery for pastoralist women to appreciate and experience the WHO recommendations.

8.2. Key study contributions to existing research

This study fills an important research gap as the first ethnographic study among pastoralist communities in Kenya and the East Africa region, providing a novel insight about ANC use among pastoralist communities. This exploratory study provides an important insight on which other researchers can expand their knowledge of pastoralist community in Kenya and other similar settings. The findings should be of relevance to local, national, and international researchers in the field of maternal health, as well as donors and funders of maternal healthcare services.

The model of partial utilisation of ANC is the key contribution of this study, demonstrating a discord between the policy and the realities on the ground, an insight on what it means for pastoralist women to use ANC. The model can help in developing interventions for services provision, while integrating these influencing factors. Other key contributions related to the model include.

(i) Community in transition. The study has revealed that the pastoralist community is a transitional one, where both traditional and modern forms of care co-exist to influence care during pregnancy and childbirth, but there is element of gradual shift from traditional to contemporary care, influence by government policy. However, multiple access barriers impede transition process. This transition needs to be supported for the community to fully integrate into modern health system.

(ii) Influence of pastoralist lifestyle on ANC access. The community in this study struggled with its own lifestyle issues that makes healthcare access more challenging. This included their migratory nature of their lifestyle, daily activities related to their animals' needs, persistent drought that leads to migration, food insecurity and culture of early marriages. All these factors influence initial access and subsequent use of ANC services.

(iii) Cultural beliefs about out of wedlock pregnancy. The study has revealed the normative cultural taboos concerning young women with out of wedlock pregnancy who face hidden pain and suffering

due to being pregnant before marriage, which strongly influences their pregnancy disclosure and ANC experiences. This negative experience may have significant impacts on pregnancy outcomes. This study recommends need to address cultural norms relating to this.

(iv) Re-affirming critical role of TBAs. The current study has added to the already existing knowledge on TBAs' roles in rural settings by describing the critical roles of TBAs and the need to strengthen their roles among pastoralist communities, considering the community lifestyle. In addition, while previous studies placed more emphasis on TBAs' referral roles for skilled birth attendance, the current study identified a gap in referral needs during pregnancy among the pastoralist community.

(v) The TBAs' practice of antenatal abdominal massage. The study provided a new insight about antenatal abdominal massage, which is believed to have preventative roles during pregnancy and childbirth. Women seek such services from TBAs. The practice may have implication on women use of healthcare services and there is a need for further research.

(vi) Important role of the handbook as a gateway to accessing government services. The study expanded the debate about the handbook as a passport to accessing government services by highlighting that the handbook is also a symbol of social, health and economic inclusion in modern healthcare for the pastoralist community. In addition, while previous studies pointed to access to hospital delivery as a key need for the handbook, the current study highlighted its relevance mainly for postpartum period. It is important therefore to expand role of the handbook to be used as effective tool to integrate pastoralist communities into healthcare system.

(vii) Need for context-specific policy and strategies for service provision. The study revealed a gap in existing model of ANC service delivery, which provides little attention to the need of pastoralist women to meet their pregnancy care needs, as services are mainly provided in centralised, urban settings. There is a strong need for

strengthening context-specific services for the pastoralist women to meet the global ANC guidelines, and might also address high maternal mortality and morbidity in the studied area.

(viii) Task-oriented style of service provision. Observational data revealed that little attention was given to information needs of the pastoralist women. The focus of the services was more task-oriented than a person-centred model. This is an important finding in relation to ANC use among pastoralist women due to their unique challenges including inability to make sense of written information, contributing to increase dependence on nurses for information needs. Thus, there is a need for an interactive person-oriented approach which should be informative, educative and consider women's circumstances.

8.3. Implications and recommendations of current study

The findings of this study have multiple implications for: (i) ANC service organisation and delivery; (ii) community engagement and empowerment; and (iii) future research.

8.3.1. ANC services organisation and delivery, and policy development

The findings of current study inform the practice on the need for (i) model of ANC service organisation and delivery, and (ii) development of policy relevant to pastoralist communities.

- **Model of ANC service organisation and delivery**

The need for a context-specific approach emerged as a key issue in the current study, in line with previous studies (Gunguwo et al., 2013, Jacobs et

al., 2018), calling for an ideal approach with the provision of a comprehensive *'one-stop-shop'* approach. In this context, the *'one-stop-shop'* implies the provision of all possible services during the initial visit, since women may not return for subsequent visits. Based on WHO (2016) recommendations on context specific approach, this proposed approach of 'one-stop-shop' could then be supported by regular mobile outreach services at the village level, which should include comprehensive ANC packages. In addition, task-shifting (the use of lay workers in the community), such as CHWs, CORPs[11] such as community health volunteers (CHVs) and TBAs (some TBAs also act as CORPs) should be re-trained and empowered to enhance health promotion and linking community with healthcare services. To enhance services delivery, it is essential to involve various stakeholders including local leaders, government, health care providers, donors, and primary stakeholders (e.g. women and community members).

Considering participants' concerns about inadequate pregnancy-related health information, it would be appropriate to develop more interactive and educative communication between nurses and women. This may include simple interactive messages included on the cover page of the handbook. For example, a **bold** simple statement with an illustration of a picture of a smiley nurse greeting the mother, which asks about the general well-being of the women (e.g. how are you today, how do you feel, any questions?) as an opening remark. In addition, the handbook should be translated into local languages (e.g. Kiswahili) for those who cannot read English. Those who cannot read at all could have the book read to during the clinic visits. This would require financial and material support; hence it should involve the MoH, donors and community leaders, and health care providers in consultation, design, and dissemination.

There is a need for developing outreach programmes related to health education for the entire community on the importance of ANC at public gatherings and community forums. In addition, awareness and maternal health

[11] COPRs-are the individuals nominated by their community and they volunteer to serve the community and support in provision of health services at the community (also referred to as community health volunteers) guided by CHEWs (MoH, Kenya 2017).

promotion should be created through mass media, particularly local radio stations where network connections exist. Consultation through short mobile phone calls can provide health information in local languages on the importance of ANC, and when to seek advice and care during pregnancy, depending on availability of telephone network services. This may be achievable by involving various stakeholders, including local radio stations, government departments, telecommunication companies, health care providers, local community leaders, and women.

- **Policy recommendations**

Health infrastructure funding: Partial ANC service access is partly explained by limited health infrastructure in the region. Article 204 of the Kenyan Constitution 2010 provides for an Equalisation Fund to improve services in marginalised areas (the pastoralist communities largely occupy these marginal areas). Therefore, given the findings of this study on poor health infrastructure as a major impediment to access ANC services, the government need to develop appropriate policy and financial framework to prioritise health needs of pastoralists communities, particularly provision of ANC services. This fund is helpful in setting up more mobile outreach ANC services, as well as health clinics (medical camps) for pastoralist communities.

Investing in technology: The unique pastoralists lifestyle defined by migration and small scattered satellite settlements (villages) is another major barrier to access ANC services. This requires unique and innovative ways to address maternal healthcare service utilisation. Therefore, the government through the Ministry of Information and Communication Technology could incentivise development of mobile applications for tracking pregnant women in marginal areas. Such applications could also target TBAs and CHWs who are the critical link between the communities and health facilities. A good example is Ghana's Mobile Midwife technology application (Entsieh et al., 2015). In addition, given the migratory nature of the pastoralist communities,

a Global Position System (GPS) application could be developed that will ease in identification of the many satellite villages over the vast rangelands. Technology is equally helpful in developing and keeping ANC visits electronic records for monitoring purpose. With the recent launch of balloon-powered internet project by Google in Kenya with the aim to connect all Kenyans to internet access (Birir, 2020), government should make it a priority for rural residents, particularly pastoralist communities to connect with healthcare services. This could potentially scale up uptake of ANC services among pastoralist communities in the remote part of Northern Kenya.

8.3.2. Recommendations for community empowerment and engagement

This section provides recommendations that include interventions for: (i) women; (ii) TBAs (iii) men; (iv) women with out of wedlock pregnancy experiences; and (v) nurses.

- **Recommendations for women's empowerment**

The current study revealed need for women empowerment (health and economically). There is need for policymakers and NGOs to recognise women's material and healthcare needs, hence empowering women through women's group forums and opportunities to create sustainable income-generating activities to gain financial stability. Basing on WHO (2016) recommendations on community-based interventions on participatory learning and action cycle, health care providers should encourage formation of women group. The group would allow women to support each other in seeking healthcare, discuss health issues in group forum supported by health care providers (e.g. CHWs) and establishing support system within the group. Also, women group to involve shareholding, revolving funds, table-banking, and loan services to provide women economic power and capabilities to access healthcare services. Local NGOs should support and foster the formation of

such groups, imparting on benefits of the group support, and empowering women on income-generating activities and how to sustain the group, consulting existing women groups for benchmarking. This should involve women's opinions, the NGOs support, health care providers, and community leaders to support such initiatives.

- **Recommendations to support women with out of wedlock pregnancy**

This study demonstrated that women with out of wedlock pregnancy are particularly marginalised and stigmatised due to cultural taboos about pregnancy before marriage, leading to being out casted from the community. This has strong implications for engagement with healthcare services during pregnancy. Therefore, the current study recommends the following:

- Nurses and CHWs should work out locally possible strategies for early surveillance and identification of women with out of wedlock pregnancy.
- Nurses should provide privacy at the clinic to address intimidation from other (married) women.
- Nurses should provide information on changing pictures of adolescent health in the context of early pregnancy and sexuality to young mothers.
- Nurses should encourage open discussions on sexual issues and provision of contraceptives where possible, to prevent early unwanted pregnancy (Exavery et al., 2013).
- The government, through collaboration with community leaders, elders, TBAs, religious groups, and NGOs should sensitively engage with the community to overcome cultural discrimination against women with out of wedlock pregnancy.
- Through policy directives government should outlaw this negative cultural practice.

- **Recommendations for enhancing TBA' roles**

The current study has identified that despite TBAs playing critical roles as a link between community and health system, their roles are largely limited to referral roles. Thus, given the community lifestyle of pastoralism, which limits regular access to healthcare, TBAs' roles should be expanded to include health promotion at the village level. In addition, TBAs should mentor upcoming younger TBAs to engage more with the healthcare system, e.g. escorting women to ANC and accompanying them during childbirth. In an organised and structured manner, TBAs should be involved in outreach clinics to mobilise women. This will greatly improve women's engagement with healthcare services and increase participation. There is therefore justified need to strengthen the roles of TBAs by re-training, recognising, and continuously supporting them, including providing them with basic protective supplies (e.g. gloves and protective gowns). Such deliberate policy stance should be initiated by the government and supported by NGOs.

- **Recommendations for men's participation**

The current study has shown that a lack of men's involvement and provision of practical support during pregnancy for women to engage with ANC is attributed to cultural beliefs about gender roles, lack of knowledge, and pastoralist lifestyle factors. Awareness should be created for men through strategies such as couple budding (e.g. encouraging ANC visits with husbands where possible), couple education, provision of friendly clinic environments that consider the cultural orientation of the community, and facilitating the attendance of women accompanied by their husbands. The current study also established that some men expressed a desire to accompany wives to ANC clinic, but lacked understanding of the expectations of their roles. Therefore, nurses should support and reach out to men in the villages with regard to the importance of ANC and reasons for their participation.

- **Support for nurses**

The current study has established that nurses work under very challenging conditions; thus, they require a range of support. The government should address resource constraints (e.g. human and equipment). However, resource challenges are a chronic problem in the public health system and cannot be resolved over a short period. In the short term, the current study recommends that the government should support nurses through regular skills development, continuous education, proper remuneration and incentives, special allowances for those in hardship areas, and recognition of their roles.

8.3.3. Recommendations for future research

The current study focused on the perspectives of the pastoralist community on factors influencing ANC experiences (facilitators and barriers). However, the findings suggest the need for further research in key areas including: (i) experiences of young women with out of wedlock pregnancy and access to healthcare services; (ii) strategies for providing education, services and promoting uptake of ANC (iii) influence of TBAs' practices, particularly antenatal abdominal massage on ANC uptake.

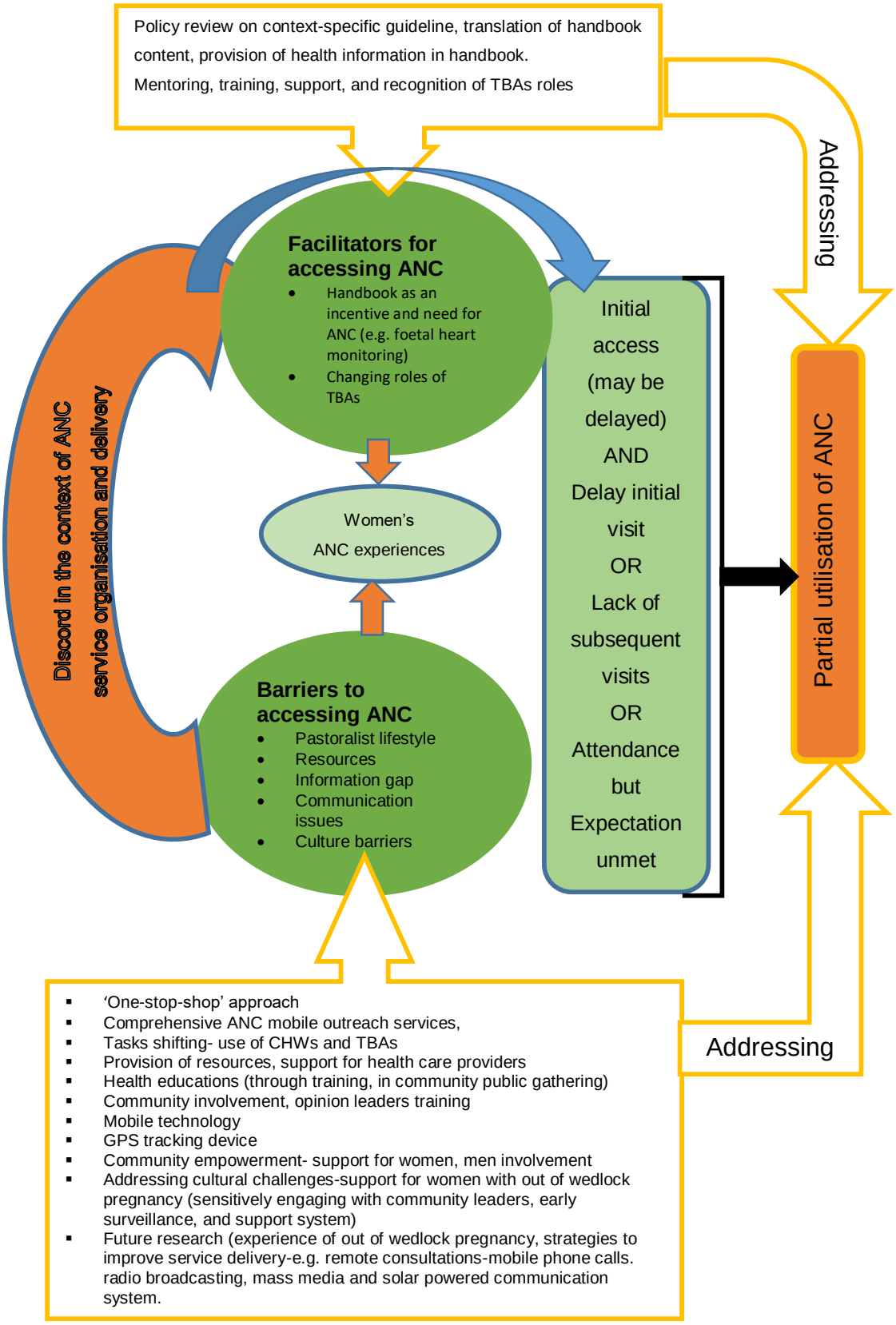
Based on the findings of the current study, cultural and social norms have significant impacts on the ANC experience of women with out of wedlock pregnancy. There is no literature available about ANC experience of women with out of wedlock pregnancy in relation to culture. A qualitative study is required to explores their views on the decision to access ANC, unmet needs, impact of out of wedlock pregnancy on their mental health and community attitude towards out of wedlock pregnancy. This would inform appropriate strategies to sensitively engage with the community to enhance optimal use of ANC and better pregnancy outcome for women with out of wedlock pregnancy.

This study demonstrated that in the current context of ANC service organisation and delivery, participants generally must travel long distances to static health facilities, which is mostly unachievable. This suggests the need for strategies to supplement the single visit that women made. Thus, feasibility study is required on use of mass media (e.g. through local radio station to provide health education), mobile technology, and installation of solar powered communication system near villages or along migratory pathways. This would link community with healthcare services and supplement the 'one-stop-shop' approach recommended above. A multi-stakeholder approach that should involve government, research funders, telecommunication companies and community members would be required to contribute to such efforts.

The current study established that TBAs' provide antenatal abdominal massage to the women during pregnancy. Research is needed to explore the influence the practice may have on women ANC service use. The study has also exposed the gap in TBAs' knowledge about the importance of ANC and dissemination of the same to the community, which needs to be researched further. Focus should be on how their roles can be reinforced to bridge the knowledge gap in the community.

Figure 19 shows the route to incorporate the model of partial ANC with potential strategies.

Figure 19: Incorporating model of partial ANC with potential strategies.



8.4. Study limitations and strengths

8.4.1. Study limitations

The study population was rural and of low socio-economic status, while the researcher lives in town, mostly visiting the village using motorised means of transport. This may suggest some power imbalance which may imply the provision of socially desirable responses; however, the implication of this power imbalance was anticipated, and the possible ways to address this were considered during data collection (section 3.8.3).

The participants in the current study were from one specific ethnic community: The Gabra, with different cultural practices and ways of living from other communities in Marsabit County (see section 1.8.1.1). Other community groups' ANC experiences would have been important to explore for a broader understanding. However, researcher's selection of participants and coverage was limited by resource, time constraints and pastoralist communities' lifestyle (characterised by frequent migration). Also, given the remoteness of the region, this had security implications for the researcher.

The limitations were also addressed as the findings are based on perspectives of multiple participants (women, men, TBAs, and nurses) with a diverse range of demographic characteristics. Also, data triangulation from thematic analysis of multiple data collection strategies (in-depth interviews, FGDs, and observations), iterative approach and CR retroductive process allowed for transferability of the findings to other groups of pastoralist communities in similar contexts.

8.4.2. Strength of the study

Focused Ethnography approach was utilised to comprehensively understand complex factors that influence pastoralist community experiences of ANC, rather than focusing on specific aspects (e.g. socio-economic or socio-cultural factors), as in many studies. In addition, as a distinctive technique for FE, participant observations helped to discover tacit knowledge and triangulated the interviews (with nurses and women) to corroborate or refute what was elicited in nurses' interviews. This particularly enabled the discovery of some structural barriers that influence women's ANC experience, especially with regard to health education and information sharing, the poor quality of which was downplayed in nurses' interviews.

The triangulation of multiple data collection methods yielded a deeper understanding of pastoralist women's ANC use. In the current study, interviews and FGDs were conducted in English or Gabra language, thus there were no translators required, suggesting that translation errors are minimised. Also, my fluency in both languages enabled further probing to gain a deeper understanding. Focusing this study on views of larger community members instead of one group also provided an opportunity to discover holistic understanding of the community views of challenges of ANC access.

Engaging with the community in their natural settings through such strategies (interviews, FGDs, and observations) enabled understanding of pastoralist women's ANC experiences in a hard-to-reach, very remote location of Northern Kenya. An understanding of a hard-to-reach community with limited access to healthcare is critical in achieving UHC, which is one of the critical pillars of the Kenyan government agenda to address inequality in access to healthcare service for all citizens by the year 2022, and the recent newly launched President's Big Four Agenda (Development Initiatives, 2019).

The study's key findings on *community in transition* and *partial utilisation of ANC* provide timely and important insights for developing countries, particularly Kenya, as the country transitions from the current WHO four ANC

visits into eight ANC visits, about some significant factors that limit pastoralist women's ANC access, in particular their pastoralist lifestyle and the quality of services. The study provides policymakers with insights on what works and what does not work in this pastoralist context when designing policies and planning for services delivery.

8.5. Conclusion

The findings from this thesis adds to the limited literature about pastoralist communities ANC experiences. The use of new model of partial utilisation of ANC highlights the key findings which demonstrates the pastoralist community ANC experiences. The community's transition to modernity are influenced by multiple factors within their context and larger Kenyan health system. Thus, the findings are critical to facilitate the development of context-specific strategies for pastoralist women by using the potential strategies incorporated in the model within the programmes design. The model also provides a framework for policy makers to develop a plan in the area of pastoralist communities' healthcare service use, involving the community and all other social system of influence that might shape pastoralist women ANC experiences.

This thesis has raised fundamental concern about the feasibility of achieving the WHO (2016) guideline of eight ANC contacts in the context of the pastoralist community lifestyle, if ANC services continue to be delivered in centralised healthcare settings. Finally, these findings will be disseminated through publications and forums, such as international and local conferences, and pastoralist group forums for voices of pastoralist communities to be heard, and to inform policies and appropriate and realistic strategies to promote optimal ANC experiences and practices for pastoralist women.

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APPENDICES

APPENDIX 1: ETHICAL APPROVAL DOCUMENTS

University of Nottingham
UK | CHINA | MALAYSIA
Email: FMHS-ResearchEthics@nottingham.ac.uk

Faculty of Medicine & Health Sciences
Research Ethics Committee
c/o Faculty PVC Office
School of Medicine Education Centre
B Floor, Medical School
Queen's Medical Centre Campus
Nottingham University Hospitals
Nottingham, NG7 2UH

24 November 2017

Talaso Dulacha Barako
PhD Student in Nursing Studies
c/o Dr C Jane Morrell
Associate Professor in Health Research
Room C54, South Block Link
School of Health Sciences
Queen's Medical Centre Campus
Nottingham University Hospitals
Nottingham
NG7 2UH

Dear Talaso Barako

Ethics Reference No: 152-1711– please always quote	
Study Title: Perspectives of a pastoralist community regarding antenatal care services in Marsabit County, Kenya: A Focused ethnography study.	
Short Title: Perspectives of antenatal care services in Kenya.	
Chief Investigator/Supervisor: Dr C Jane Morrell, Associate Professor, Nursing Studies	
Lead Investigators/student: Talaso Dulacha Barako, PhD Student, Nursing Studies	
Other Key Investigators: Dr S Konstantinidis, Assistant Professor in e-learning and Health Informatics, Nursing Studies.	
Type of Study: PhD student project, Qualitative/quantitative, overseas	
Proposed Start Date: 01/01/2018	**Proposed End Date:** 30/06/2018 6 mths
No of Subjects: 50	**Age:** 18+years
School: Health Sciences	

The Committee considered this application at its meeting on 13 November 2017 and the following documents were received:

- Perspective to ANC: FMHS REC Application form and supporting documents version 1.0: 20 October 2017.

These have been reviewed and are satisfactory and the study has been given a favourable opinion.

A favourable opinion has been given on the understanding that:

1. All appropriate ethical and regulatory permissions are respected and followed in accordance with all local laws of the country in which the study is being conducted and those required by the host organisation/s involved.
2. Copies of Approval/Permission letters from: Kenyatta National Hospital/University of Nairobi Ethics Research Committee, Nairobi Kenya; Marsabit County Ministry of Health.
3. The protocol agreed is followed and the Committee is informed of any changes using a notice of amendment form (please request a form).
4. The Chair is informed of any serious or unexpected event.

University of Nottingham
UK | CHINA | MALAYSIA

5. An End of Project Progress Report is completed and returned when the study has finished (Please request a form).

Yours sincerely



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APPROVED 10 JAN 2018

Ref: KNH-ERC/A/14

10th January 2018

Taliaso Dulecha Baraka
PhD candidate
School of Health Sciences
University of Nottingham, UK
Email:baraka.taliaso@nottingham.ac.uk

Dear Taliaso

REVISED RESEARCH PROPOSAL: "PERSPECTIVES OF A PASTORALIST COMMUNITY REGARDING ANTENATAL CARE SERVICES IN MARSABIT COUNTY: A FOCUSED ETHNOGRAPHY STUDY (P689/10/2017)

This is to inform you that the KNH- UoN Ethics & Research Committee (KNH- UoN ERC) has reviewed and approved your above revised proposal. The approval period is from 10th January 2018 – 9th January 2019.

This approval is subject to compliance with the following requirements:

a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
b) All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH-UoN ERC before implementation.
c) Death and life threatening problems and serious adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH-UoN ERC within 72 hours of notification.
d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH- UoN ERC within 72 hours.
e) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (Attach a comprehensive progress report to support the renewal)
f) Clearance for export of biological specimens must be obtained from KNH- UoN ERC for each batch of shipment.
g) Submission of an executive summary report within 90 days upon completion of the study. This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/ or plagiarism.

For more details consult the KNH- UoN ERC website http://www.erc.uonbi.ac.ke

Protect to discover

Yours sincerely,

PROF W.C. CHINDIA
SECRETARY, KNH-UoN ERC

c.c. The Principal, College of Health Sciences, UoN
The Deputy Director, CS, KNH
The Assistant Director, Health Information, KNH
The Chair, KNH- UoN ERC
Supervisors: Prof. Helen Spiby, Faculty of Medicine and Health Sciences, University of Nottingham
Dr.Cedric Evans, Faculty of Medicine and Health Services, University of Nottingham
Dr.Stathis Konstantoredis, Faculty of Medicine and Health Sciences University of Nottingham
Prof.Dimoni Grace Morosa, School of Nursing Sciences, University of Nairobi
Dr. Emmah K. Matheka, School of Nursing Sciences, University of Nairobi

REPUBLIC OF KENYA

COUNTY GOVERNMENT OF MARSABIT

DEPARTMENT OF HEALTH

Ref

Director Medical Services

P.o Box 5-60500

Marsabit

19th January 2018

Talaso Dulach Baroko

PHD Student, School of Health Sciences

University of Nottingham, UK

Dear Talaso;

RE: PHD Study- Support Letter to conduct Research in Marsabit

This is to inform you that your request for support to conduct study on the above mentioned subject has been granted. You can therefore continue with your study as proposed. We expect you to share with the department findings and recommendations from the study. The Department will give you the necessary support during your study period.

We wish you success in your study.

COUNTY DIRECTOR
CLINICAL AND REFERRAL SERVICES
P.O. Box 5-60500 MARSABIT

Dr. Okotu Biru
County Director Clinical and Referral Services
Marsabit County

APPENDIX 2: PARTICIPANT INFORMATION SHEET

Title of Study: **Exploring antenatal care experiences amongst pastoralist communities in Kenya: a focused ethnographic study**

Name of Researcher(s): Talaso Dulacha Barako

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. The information sheet explains the purpose of the study and what will happen if you take part in the study. The researcher (Talaso) will go through the information sheet with you and answer any questions you have. Ask me if there is anything that is not clear. Please take your time to decide whether you would wish to participate. You can take with you the information sheet.

What is the purpose of the study?

The purpose of this study is educational, as part of the researcher's PhD study which the researcher is doing at the University of Nottingham in United Kingdom. The study will involve interviews and focus group discussions group (FGDs) to find out your experiences, knowledge, perspectives to the antenatal care (ANC) services and the factors influencing antenatal care practices among pastoralist women of Marsabit County. The information you provide regarding factors influencing antenatal care practices might inform direction for future interventions in this County. At the time of this proposed study, the literature review has not shown any studies on maternal health/antenatal care services that have been undertaken among the pastoralist communities living in Marsabit County. Exploring and understanding specific factors that influence use of ANC is critical to improving maternal health services in this largely Pastoralist County.

Why have I been invited?

You are being invited to take part because you met the study inclusion criteria. You are invited because you are member of this community. You may or may be related to the pregnant or post-natal women to be included in the study. Inclusion criteria is based on your views on factors that influence use of antenatal care services. Your relationship in this context is based on cultural practices, geographical settings and community setting you all share with each other. We are inviting 50 people to participate in this study. The potential participants (women, husbands, and traditional birth attendants) will be chosen from the villages. The pregnant women and post-natal mothers and nurses will be recruited for face to face interviews while husbands, mothers-in-laws and TBAs will be recruited for focus group discussions. The nurses will be chosen from the dispensaries that serves the villages. The researcher would like to hear about your experiences and views on factors that influence their use of antenatal care services will be of importance to this study.

Do I have to take part?

Participation in the study is voluntary. It is up to you to decide whether to take part. If you do decide to take part, you will be given this participant information sheet to keep and be asked to sign/thumb print a consent form. If you decide to take part, you are still free to withdraw at any time and without giving a reason. Your decision to pull out from the study will have no effect on the care you are provided at the health facilities.

What will happen to me if I take part?

If you agree to participate in this study, the researcher (Talaso) will take time to go through this participant information sheet (PIS) with you slowly, make sure you understand the purpose of the study. After you understood the purpose of the research and voluntarily agreed to participate, the researcher will request you to sign a consent form or put your thumb print on the form. You will be given copy of the consent form. The researcher will organise interview at a time convenient to you in your home. You will be involved in interviews or focus group discussions that will be held by the researcher in a private area where you feel comfortable answering questions. The focus group discussions will be held in the community social hall in the villages. Interviews will be held in your homes if appropriate. The interview and FGDs will last approximately 60 minutes and it will be audio-taped with your consent so that the important information will not be missed out for later analysis. The interviews and FGDs will cover topics such as what do ANC mean to you? What do you perceive as factors that influence ANC use? What do you think would facilitates ANC use? The study will also involve observation of the nurse consultation during antenatal care clinic. Observation will only involve notetaking to understand how care is provided in real life. Observation of the nurses will only be done if they have consented and clarification will be given that they are not being monitored or assessed.

Expenses and inconvenience allowance

Participants will not be paid to participate in the study. The interviews and FGDs will be held at the village level for women, men, TBAs and mothers-in-law and while the interviews and observation for nurses at the dispensaries, thus the participants will not be expected to incur any expenses. In case of any unanticipated cost related to the study, the participant will be facilitated. However, during the FGDs drinks and biscuits will be provided. For the women, they will be given a packet of nutritious porridge or a T-shirt for the baby.

What are the possible disadvantages and risks of taking part?

There is no specific disadvantage or any foreseeable risk of taking part in proposed study. However, sometimes the interview may involve sensitive questions that may upset you or you are uncomfortable to answer. I will keep everything you tell me as confidential as possible. I will use a code number to identify you in a password-protected computer database and will keep all our paper records in a locked file cabinet.

Also, answering questions in the interview may be uncomfortable for you. If there are any questions you do not want to answer, you can skip them. You have the right to refuse the interview or participate in FGDs or any questions asked during the interviews.

It may be embarrassing for you to have to tell us about some sensitive issues regarding why you may not be practicing antenatal care. I will do everything I can to ensure that this is done in private. Furthermore, the researcher is professional with training in the interviews and focus group discussion. Also, maybe it is stressful to recall pass experiences.

What are the possible benefits of taking part?

There are no immediate benefits for any of the study participants. You may benefit by giving the information on your experiences and perspectives to ANC use and what you perceive as the factors influencing ANC use in this community. This information could inform the potential design for future interventions that may make provision of antenatal care services accessible to the pregnant women in this community.

Also, the information you provide will help us better understand the factors influencing antenatal care services among pastoralist community. The findings might also be the basis for a large-scale study to explore issues on maternal health services in this County since no documented study on maternal health has been undertaken in the whole County.

Will my taking part in the study be kept confidential?

Your participation in this study will be kept confidential. We are guided by and will follow ethical and legal practice and all the information that you will provide is treated with utmost confidentiality. Consideration will be taken into ethical concerns such as anonymity, confidentiality and informed consent since qualitative research are more invasive to peoples' private lives (Sanjari, 2014). The researcher will manage the data with confidentially. Only those persons who are authorised from University of Nottingham and have organised this study will be having access to the data. These persons will have duty of maintaining confidentiality. No participants will be referred to by name in the recorded information, instead we create and use identification number so that you will not be recognised. The researcher will be guided by the Constitution of Kenya (2010), Article 31 on protection of individuals' information and privacy. All the information gathered from you will be kept securely and strictly confidential. All interviews and audio recorded data will be translated from local dialect to English immediately and uploaded to secure password protected UoN database. The information you provide will be kept securely for 7 years and after this period will be securely disposed. During this time, all precautions will be taken by all those involved to maintain your confidentiality, only members of the research team will have access to your personal data. We would also like to seek your consent so that the data may be stored and used in possible future research during and after 7 years– this is optional (please indicate you agree to this on the consent form)

What will happen if I do not want to carry on with the study?

Your participation is voluntary, and you are free to withdraw at any time, without giving any reason. However, any information that you have already given, will not be removed and you will be requested to provide consent it will be part of study report.

What will happen to the results of the study?

The findings will be part of academic thesis write up as requirement for completion of PhD studies at the University of Nottingham in UK. The final findings of the study will also be shared with the Marsabit County government and be published in international journal. It will also be presented in conferences to inform services development.

Who is organising and funding the research?

This research is being organised by the University of Nottingham and the study is funded by Commonwealth Scholarship Commission, United Kingdom. However, the data collection and field work expenses are the researchers' (PhD student) responsibility.

Who has reviewed the study?

The study has been reviewed by my research supervisors: Dr C. Jane Morrell and Dr Stathis Konstantinidis. Also, confirmation review panel at the University of Nottingham. The Faculty of Medicine & Health Sciences (FMHS) Research Ethics Committee and The Kenyatta National Hospital/ University of Nairobi (KNH/UoN) Ethics Research Committee has approved the study. Also, Marsabit County government, Ministry of Health has authorised the study.

What if there is a problem?
If you have any questions or you need clarification for participation in proposed study, you can contact me on +254722790680 or email: ntxtdb@nottingham.ac.uk and if my response did not satisfy you and you needed further clarifications, you can contact secretary KNH-UoN ERC on Telephone No. 2726300 Ext. 44102; email uonknh_erc@uonbi.ac.ke.
Further information and contact details
Name and address for correspondence with applicant:

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United Kingdom contact: 07471117556
Email: ntxtdb@nottingham.ac.uk
Thank you very much for taking time to listen/read information sheet

APPENDIX 3: CONSENT FORMS

English version

Title of Study: Exploring antenatal care experiences amongst pastoralist communities in Kenya: a focused ethnographic study

REC ref:

Name of Researcher: Talaso Dulacha Barako

Name of Participant: **Please initial box**

1. I confirm that I have read and understand the information sheet version number 1.0 dated 20.10.2017 for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. ☐
3. I understand that relevant sections of data collected in the study may be looked at by responsible individuals from the University of Nottingham, the research group where it is relevant to my taking part in this study. I give permission for these individuals to have access to these records and to collect, store, analyse and publish information obtained from my participation in this study. I understand that my personal details will be kept confidential. ☐
4. I understand that information about me recorded during the study will be kept in a secure database. If data is transferred to others it will be made anonymous. Data will be kept for 7 years after the results of this study have been published and then destroyed. ☐
5. (If appropriate) I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. Any data used will be anonymised, and I will not be identified in any way. ☐
6. The interviews, focus group discussions will be tape recorded if I accept it to be so ☐
7. I understand short notes will be taken during observed interactions if I accept it to be so ☐
8. I voluntarily agree to take part in the above study. ☐

Name of Participant	Date	Signature
_____	_____	_____

Name of Principal Investigator	Date	Signature
Talaso Dulacha Barako	_____	_____

2 copies: 1 for participant, 1 for the project notes.

This sheet should be stored separately from the consent form and other project documents.

This sheet should be stored separately from the consent form and other project documents.

STUDY NUMBER

Name:

.....

Address:

.....

Telephone number: .....

Optional: I agree to my contact details being stored for the purpose of being invited to participate in future research studies

Signature: ..... **Date:** .....

Information below to be completed by one of the named investigators:

I confirm that I have fully explained the purpose of the study and what is involved to:

Name: .....

I have given the above named a copy of this form together with the information sheet.

Investigators Signature: .....

Name .....

Ethics Code: .....

Study Number: .....

Kiswahili version

Maelezo ya utafiti (participant information sheet) - Kiswahili version

Mpendwa mshiriki,

Mimi kwa majina naitwa Talaso Dulacha , mtafiti na ninafanya utafiti kuhusu " barriers and facilitators in antenatal care services" kwa jamii ya Marsabit County. Ili kupata taarifa muhimu, nitatumia maswali yaliyoandikwa kwenye hojaji na yatajazwa na wamama wenye mjaa mzito and wenye walikuwa mjamzito miaka moja iliyopita.

Hakuna hatari yoyote kwa ajili ya kushiriki. Habari utakayotoa itashughulikiwa kwa njia ya siri kama inavyotakiwa na sheria na maadili ya matibabu. Jina lako halitaandikwa popote na hamtahitajika kuandika taarifa yoyote itakayowatambulisha. Wewe uko huru kujitoa kutoka kwa utafiti huu wakati wowote bila ya hofu yoyote ya kuhangaishwa.

Matokeo ya utafiti huu yataboresha maamuzi ya huduma ya afya ya wamama mjamzito, matokeo ya mgonjwa na taarifa juu ya uundaji wa sera, utekelezaji na tathmini na kusaidia katika kutathmini mahitaji ya mafunzo. Kama utataka kujua matokeo ya utafiti utaharifiwa.

Unaweza kuuliza maswali yoyote kuhusu haki zako kama mshiriki au kitu chengine chochote kuhusu utafiti huu. Unaweza wasiliana na mtafiti kwenye simu ya mkononi nambari 0722790680 au barua pepe talaso.barako@nottingham.ac.uk

Unapohitaji maelezo zaidi kuhusu haki yako kwa kushiriki kwa utafiti huu, unaweza wasiliana na Secretary/Chairperson, Kenyatta National Hospital-University of Nairobi Ethics and Research Committee, nambari ya simu 2726300 Ext. 44102 au barua pepe uonknh_erc@uonbi.ac.ke

Asante kwa kutumia muda wako.

FOMU YA OMBI LA RIDHAA

		sahihi
1	Nimepewa nafasi ya kuhoji na kutaka ufafanuzi kwa lolote linalohusiana na utafiti huu	
2	nimehoji, na nimeridhika kwa jawabu nilizopata, ikiwa nitakuwa na suali lolote wakati wote wa kazi hii nitamuona mtafiti Talaso Dulacha Barako	
3	Nimefahamishwa na nikaelewa ya kwamba ninaweza wakati wowote kujiondoa kwenye utafiti huu iwapo ninataka kufanya hivyo, uamuzi wangu huo hautanipelekea kuadibiwa kwa njia yeyote ile.	
4	Nimekubali kujibu maswali ninayo ulizwa.	
6	Nimekubali kuhojiwa kwa boma langu	

Idhini ya Mshiriki

Nimesoma na kuelewa maelezo yaliyoko kuhusu utafiti huu. Mimi nakubali kushiriki katika utafiti huu kwa hiari.

Sahihi ya Mshiriki: _____

Tarehe: _____

Jina la Mshiririki

_____

Sahihi ya Mtafiti: _____

Tarehe:_____

Jina la Mtafiti

_____

Tarehe:_____

APPENDIX 4: INTERVIEW GUIDE

Introduction

Thank you very much for agreeing to participate in this study. As I had discussed with you earlier, I am interested in exploring your experiences and perspective to the factors influencing ANC use. You do not have to answer all the questions. Only answer what you feel comfortable with. Anything you say will be completely confidential and will be anonymously reported. Do you have any questions about the interview or the research? Let us start by talking little about yourself, self-introduction?

Pregnant women and post-natal mothers

Demographic Characteristics: Participant age, Occupation, Parity: Gravida.

Table 12: Interview schedule for pregnant woman and post-natal mothers

Key concepts	Interview questions
Experiences	❖ If any, what is your experience with antenatal care services? (Probe – what good experience did you have? What experience did you have that you did not like?
Knowledge	❖ What do you know about antenatal care services? (probe)- when to start, how many ANC clinics to attend? Why you attend ANC? What services are offered?
Practices	❖ Why do you think it is necessary to go for antenatal care services (probe; benefit of ANC)
Factors influencing ANC services	❖ What do you think are the reasons of using or not using antenatal care services? Explain each (Probe husband, probe mother-in-law, probe nurses, culturally, religiously, environment, community, health facility). ❖ What are the challenges for attending ANC services? How has this influence your pregnancy (currently and previously) ❖ In your views what would you say are the major needs/issues that affect your use of antenatal care services in this community? (probe) ❖ What do you think are the consequences of not using ANC services? ❖ Please share with me what the community say about women use of antenatal care services?
Potential solutions	❖ In your opinion, do you think there is something that can be done to enhance ANC services? ❖ What do you think can be done to enhance provision of ANC at community and health facility level? (Probe husband, probe mother-in-law, probe nurses). Have we forgotten something? Do you want to add anything? Thank you for participation in this proposed study

Nurses

Demographic Characteristics:

Participant age,

Level of education,

Work experience.

Table 13: Interview schedule for nurses

Key concepts	***Interview questions***
Experiences	❖ How is your experience with antenatal care services provision at this facility? Can you expand on your response?
Practices	❖ What are some of the antenatal care services provided to prepare pregnant woman for childbirth at this facility? probe on activities? ❖ From your experiences what influences the pregnant woman use of ANC? Probe
Factors influencing ANC services	❖ What do you think are the challenges in provision of antenatal care services? Explain ❖ (culturally, religiously, environment, community, health facility). ❖ In your views what would you say are the major needs/issues that affect women use of antenatal care services in this community? (probe nurses). ❖ What do you think are the consequences of not using ANC services? ❖ Please share with me what the community say about women use of antenatal care services?
Potential solution	❖ In your opinion, do you think there is something that can be done to enhance ANC services? ❖ What services do you think can be provided at community and facility level to enhance ANC services delivery? What is your suggestion? (Probe husbands, probe mother-in-law, probe women). Have we forgotten something? Do you want to add anything? *Thank you for participation in this proposed study*

APPENDIX 5: FOCUS GROUP DISCUSSIONS

Thank you very much for agreeing to participate in this study. As I had discussed with you earlier, I am interested in exploring your experiences, views and perspective to the factors influencing ANC use. You do not have to answer all the questions. Anything you say will be completely confidential and will be anonymously reported. Do you have any questions about the discussion or the research?

Warm up: Let us start the discussion by talking little about yourself, self-introduction and know each other?

Introductory question

I will give you few minutes to think about your knowledge and your roles in antenatal care services attendance. Is anyone happy to share their experiences?

Table 14: Focus group discussions for husbands

Time per section (minute)	**Key concepts**	**Guiding questions for discussions**
15 minutes	*Knowledge*	Let's discuss. ❖ What is the first thing that comes to your mind when you hear antenatal care services? ❖ What do you know about antenatal care services? (probe) ❖ Why would pregnant women supposed to attend antenatal care services? (probe)
15	Roles and practices	❖ With regards to antenatal care practices, what roles do you play as husbands so that your wives can attend the antenatal care services?
20	*Factors influencing ANC services*	❖ In your views what would you say are the major needs/issues that affect your wife use of antenatal care services in this community? (probe) (Probe mother-in-law, probe women, probe nurses). ❖ What do you think are the consequences of not using ANC services? ❖ Please share with me what the community say about women use of antenatal care services?
10	*Potential solutions*	❖ What do you think can be done to facilitate antenatal care services at the community and facility level? What interventions can be provided? Have we forgotten something? Anyone want to add anything? *Thank you for participation*

Table 15: Focus group discussions for traditional birth attendants

Time per section (minute)	Key concepts	Guiding questions for discussion
10 minutes	*Knowledge* of antenatal care services	What is the first thing that comes to your mind when you hear antenatal care services? ❖ What do you know about antenatal care services? ❖ Are there any benefits for pregnant women to attend antenatal care services? (probe) ❖ From you experience, what will make pregnant women go for antenatal care services?
10	*Practices and roles*	❖ What if any, what are your roles in ensuring pregnant women attend antenatal care services?
5	*Experiences*	❖ What influence pregnant women choice of birthplace, will attendance of ANC play any part? (probe) ❖ From your experience, who make decision for use of ANC? (probe)
20	*Barriers*	❖ If any, what challenges do you think pregnant woman faces in accessing antenatal care services? ❖ (Probe husbands, probe mother-in-law, probe women). ❖ In your views what would you say are the major needs/issues that affect your women use of antenatal care services in this community? (probe) (Probe mother-in-law, probe women, probe nurses). ❖ What do you think are the consequences of not using ANC services?
15	*Potential solutions*	❖ What do you think can be done to facilitate antenatal care services at the community and facility level? What interventions can be provided? ❖ (Probe husbands, probe mother-in-law, probe women). Have we forgotten something? Anyone want to add anything? *Thank you for participation*

APPENDIX 6: OBSERVATION GUIDE FOR NURSE-WOMEN INTERACTIONS IN ANC CONSULTATION

1. How they provide consultation (consultation style)?
2. How is the interaction between women and the nurses (verbal and no-verbal communication)?
3. How do the nurse provide information to the pregnant women?
4. What kind of information is given to the pregnant women?
5. Do pregnant women get to ask questions about the care given?
6. Do the nurses talk about the importance of antenatal care?
7. How is the information on the ANC clinic return date given?
8. How is the information on ANC documented for the pregnant woman use?
9. Is the care given person centered or task oriented?

APPENDIX 7: EXAMPLE OF AN INTERVIEW TRANSCRIPT

2nd Interview: Nurse Gann (pseudonym).

Name: Gann

Age: 33 years

Level of education: Diploma

Work experience: 5 years

Work in this facility: 1 year

Me: For the period you have been working in this facility please tell me your experience with ANC service provision?

Gann: With my previous work place I noticed women start ANC late…let's say 34 weeks onward, not like when they are supposed to start at sixteen weeks and that health centre was near big town but here… woo, women do not come for ANC clinic, if they do towards end of pregnancy…the last trimester only once. It is like their main reason is to get the clinic booklet…here they come one or two and that is it.

Me: To you as health care provider to these mothers what exactly does ANC services delivery mean to you?

Gann: Health of the mother pre and post -delivery…for ANC it is my entry path where-by I know the mother well…thereafter mother and me after delivery…it does not have to end after forty weeks…at least I try to maintain that relationship...be friendly to know how the baby is going…

Me: What do you think are the reasons why these women come so late to the clinic in the last trimester? Oh sorry do you ask them why they come so late?

Gann: most of them would say that it's not their first delivery…they know these things (what we do for them).…you see the NGOs who help them with food and school fees for their children normally ask them for the clinic booklet and if they have gone for clinic and child immunization records. They know without this clinic booklet they will not be helped...like NGO C. helps them with school fees…you see they will be asked the child date of birth, delivery history, weight and immunization status. If the mother has not gone to the clinic she

won't know this and all this is recorded in clinic booklet which they get during pregnancy…this is one reason why these people come to the ANC clinic.

Me: Does that mean these mothers do not know importance of ANC clinic?

Gann: For those who come, I tried telling them the reasons for the investigations like blood group and ANC profile, Hb…but then they can't see or will not do. Yes, they do not see the importance of ANC.

Me: For those who come, do you tell them to tell other women about the clinic?

Gann: we call TBAs and talk to them to tell women to come for the clinic …these TBAs are the very first people these women go to before they come to us. The much we can do for those who come to hospital, we talk to them, but mostly we use TBAs……even when they get problem instead of coming straight to the clinic they pass through the TBAs.

Me: Why do you think they go to the TBAs first instead of coming to the health facility?

Gann: They say the TBAs check the baby, massage the uterus to let the baby drop in to the pelvis or sometime massage to relieve pressure of heavy babies…but when they come here we tell them not to do that…emphasizing to them that the baby will automatically come down when its' time to come out.

Me: From your experience, do you think they are more comfortable with TBAs service than health care providers'?

Gann: They are used to that and they are comfortable with them than us...that is why we try to involve TBAs to change that mentality…yes they can provide the services they need like massage but not necessary to help in pushing the baby down into the pelvis or out of pelvis.

…some believe that if TBAs will not do that massage the legs will be numbed and they will not be able to walk.

Me: From what they tell you and your own experience what is the role of TBA?

Gann: They are more or less like advisors…they tell them…like you are not supposed to eat this and that or do work…at least what they tell them not to do heavy work…but the reasons behind why they don't do heavy work they will not tell them.

Me: What about food, **what type of food do they advise them on?**

Gann: I do not exactly know which food type they advise them to eat or not to eat but …. like now when it has rained and it is green there are some natural green vegetable that are consumable. I tell them to take this chance to take this vegetable because they are free and readily available…laughing…they said ….no, no that is our animals' food. Also when they come here and I see mother with swollen legs and I tell them to rest with legs elevated…these women do a lot of heavy work. They would say...'no I can't sit in one place. I have to give priority to my animals'…they walk long distance for 'fora' or looking after the animals…you see I can't tell them not to go for 'fora'.

Me: Please tell me, what sort of services do you provide during ANC visits?

Gann: Here at least we do HIV testing…counselling (I interrupted), counselling on? …we tell them, now that they have started clinic with us, to continue until the end and also to deliver with us in hospital. At least some problem like bleeding can be stopped when in hospital. …when they feel dizziness because may be they have low Hb…when they stay home all they will be told my family member is to take Panadol (paracetamol) and sleep. We tell them if they feel pain or there is bleeding during pregnancy to come to the hospital, but some of them when they feel pain…especially towards term they will not come…they fear being laughed at my other women…that she fears labour...in this community labour is kept secret and nobody should know except a TBA and immediate family member whom should be a female……the woman should not cry or make any sort of noise when laboring to avoid other people knowing.

They believe that if many people know, it will delay labour...it is also considered an embarrassment to the family if she screams.

Me: When you give health education on the food to be consumed during pregnancy, what sort of food do you advised them on?

Gann: at least the food here is maize and beans…like now after it rained there is plenty of milk…but they do not drink the milk they sell it…but we tell them to drink also the milk and also buy the vegetable which are sometime available…they say they wanted money from the milk to buy other things. We also give them porridge whether they have low MUAC or not…for those with low MUAC we enroll them to SFP (supplementary feeding programme) and give them extra porridge.

Me: Could the provision of porridge be an encouraging factor to come to the ANC clinic?

Gann: yes, for some, when the porridge finishes, she knows more porridges will be given when she comes back. We extend provision of porridge even after delivery for about three months.

Me: Do you explain to the mothers the reasons why they take the tablets and the injections?

Gann: We do explain…many women here have low Hb…we explain to them their blood level…is not enough…they should try to take the tablets until delivery to improve blood level…some try because they do not like blood transfusions...at least some will try if we tell them that.

Me: From your experience or what you hear the mothers saying, when these pregnant mothers take the drugs like ferrous tablets and folic acid what do they say about its use?

Gann: [laughing]...at least I tell them to take one tablet once at bed time or in the morning and when they come back to the clinic I asked them if they have finished taking all the tablets, how they felt taking the tablets, if it caused them any problem, side effects...then they will say the tablet makes them nauseated…they felt like vomiting…so I would tell her to take it when going to bed...at least she will be sleeping and will not feel nauseated, instead of taking in the day.

Me: Earlier on you mentioned that they do not like blood transfusion, why don't they like blood transfusion?

Gann: I have never understood why but they refuse. For example, I had one case where the Hb. was very low and I told her I will refer her to the main hospital where she will be given blood transfusion so that she will not deliver here in health centre. She refused completely saying she will take blood and their animal liver, animal product…I do not know why...they fear blood transfusion.

Me: Do the partners come to the ANC with the women and what role do they play during pregnancy?

Gann: very rare to see husbands coming here, instead the TBAs…I haven't seen mother in-laws either. I do not understand the men role here…mostly they are with their animals...in the bush or just stay home.

Me: What role do community health workers play in the community?

Gann: They go in manyattas, encourage mothers to go to the hospital for delivering, ANC clinic, they talk with TBAs to tell the mothers to go to the clinic.

Me: Please tell me if the CHW, CHV and TBAs who are based in the villages perform their roles, why then do the mothers come to the clinic late in pregnancy or do not come or deliver at home, could there be other reasons?

Gann: There some manyattas when they go there...it is difficult to convince them to come to clinic…they even tell CHVs…it is like we change what they know, their practices and they do not want change…I do not exactly know how these people perform their role also…you see I can't know.

Me: Who are the difficult ones to convince, is it elders or the pregnant women themselves?

Gann: In some villages…the mothers will tell the wazees (elders) that we have arrived…and the wazees will come and ask us what we do or sometimes when we reach the villages we stay there waiting for women to come out with children or pregnant women and nobody come out to us and we have explained to wazees and persuade with them first. They are still glued to their

practices…they do not understand the maternal health services... they do not like children or pregnant women injected.

Me: Why do you think it is a problem to engage with them, could there be religious or cultural reasons?

Gann: I think it is cultural factors…, fear of injections having bad effects on them.

Me: From what you hear them saying, what could be these cultural factors that hinders them from using health services?

Gann: Many do not understand why one goes to hospital for this clinic and to deliver in hospital...to them that is not part of their practices. Delivery is normal process, so there is no need for hospital care……then there is this belief about when the baby is delivered he or she should be held first by who...not so and so...or baby should be given something like cow milk immediately...or this and…. that…all these funny practices….

Me: What about ANC, do they still come all the visit?

Gann: They come but one or two visit.

Me: Earlier on you mention that the main reason why they come is for the clinic booklet, why do you think that is the case?

Gann…this book (opening up the pages)…..has a lot of information...for mother and child….but they are more interested with the child information…like weight, date of birth...immunisation given to the child...all the recorded information about the child...you see it will help them when the child start clinic…also to get assistance from NGOs...it is good booklet to be used up to when the child is 5 years...also to get birth certificate…you see all these reasons……..laughing……..but some of them lost it and come here…almost crying for help.

Me: What role do the religious leaders play to enhance ANC services, people like Christian leaders, Muslim leaders, traditional leaders?

Gann: For the durations I have been here, at least I have seen effort from the Catholic…the priest brings the mothers from the villages in his car and take them back...but others …no…I do not understand their role.

Me: Earlier on you said you do HIV and AIDs testing, do you do counselling for these mothers?

Gann: Yes, we do both pre and post-test counselling.

Me: What do these mothers say about testing for the HIV and AIDs?

Gann: many of them like to know their status. They like it to be tested for HIV and AIDs, like these days we go to the villages and test for everyone.

Me: Do they take the testing positively and do they know reasons for why the HIV and AIDs testing is done?

Gann: yes…but I haven't seen them coming with the husband for the test. They know a HIV and AIDs is bad disease that can kill.

Me: From your experience do husbands support and accompany their wives to clinic and why?

Gann: No, I haven't seen any coming with the husbands, but I did not ask if they object to them coming...here it is very rare to see husband coming with the wife, but some young couples, I saw once. I saw in one or two occasion if the wife is very young and newly married. Men leave that work to TBAs and mother in-laws.

Me: Do you integrate family planning services provision into ANC clinic?

Gann: hey…these people do not like talking about FP, [laughing]… every time we try to talk about it they say their husbands are at 'fora' (further afield, grazing animals away from villages), and there is no need. For those with many children I try to tell them to practice FP. Some will come complaining of dizziness, she doesn't have enough blood…feeling weak…with many children, poor nutrition…very small babies…yet pregnant again. We just tell them to practice…space the child birth or stop giving birth considering the reality of life…they just laugh saying god will provide.

Me: How about men, do you involve them and do they talk about ANC?

Gann…no unless…may be those in town, few of them…they do not come with husbands…. how will I involve them… they always say he is away…or busy.

Me: Do you go for outreach clinic; what services do you provide?

Gann: Basically, it is just like what we provide at the dispensary…health education, nutritional supplements, children immunization…but this outreach

services are very rare, vehicles have broken down, it all depended on funding from NGOs, it has stopped.

Me: Do you also provide ANC clinic at the village level?

Gann: Yes… care we provide is comprehensive services, everything that we do here, the first we deal with nutrition, treatment for any other ailments and then we find a hut where we can assess the pregnant mothers and give them tablets.

Me: What is your experience in dealing with those girls who get pregnant out of wedlock, what do the community say about them?

Gann: they come very late in pregnancy or when in labour… I came to learn that they are considered as bad girls…they call them spoilt ones and I think that is why they hide pregnancy…it is bad practices. Community need to abandon it…community here do not want to associate with such cases.

Me: Why do you think they hide pregnancy and does that affect their start of ANC clinic?

Gann…yaah, here even those who are married early… like there was once a fifteen-year-old one...has not yet understood what pregnancy is all about...she was shy...may be wondering what I will think of her being pregnant at young age...she was brought by mother-in-law...most of them for those married early the mother in-laws brings them or someone older like sister...they can't even speak for themselves...they are shy, mother in-law speaks for them. For those who get pregnant out of wedlock, they do not come, or when they come to the clinic, will be towards end of pregnancy, they try to hide...even saying their surname…or child's father. They normally name the child after their own father…she looks around to see if other women are listening to what she says…she fears. Very few of them come to ANC clinic...very few….at 37 weeks and others in labour…. because TBAs do not support them at home.

Me: Do you ask why women take that long to come to start the ANC clinic?

Gann: Nobody will give you the reasons…she will just keep quiet, when she keeps quiet like that I will not ask her lots of questions because she will feel

intimidated and will not even come for the child clinic...we avoid asking her a lot...the more we try to ask, personal information, the more she will withdraw….and next time she will wonder what will be asked again.

Me: Those who get pregnant out of wedlock, do they bring themselves to the clinic or they are brought by someone?

Gann: Those I have seen, I haven't seen brought by anyone…they bring themselves…some of them are very young girls, but they are few.

Me: Do you provide any extra support for these group of women?

Gann…ummh, here I can't say real...no

Me: What do community says about ANC attendance, do they support, what is their perspectives?

Gann: …I won't real say they support…we try to involve the village elder...those villages where we might find one...we talk to him…he will in turn tell them that the daktaris (doctors) have come not only for children but to see pregnant women also. The community elders do not talk about ANC…unless may be with CHVs…generally they are less receptive of ANC clinic and delivery except for children immunization sometimes…some still complain about many injections we give to the children.

Me: Earlier you mention the close relationship of the pregnant mothers and the TBAs, how is the relationship of these mother to you as health care provider in terms of interaction during pregnancy?

Gann: …I cannot say all of them… but some are free and could tell me 'I feel like this and that' or if there is something I noticed with the mother and when I keep asking she will tell me more.

Me: For the period that you have been here, what are the main barriers in providing ANC services to the mothers?

Gann: One main barrier I have noted is that when a TBA is not motivated the delivery of the service is difficulty for us…it is like these people trust TBAs…the one thing I have seen is that she (pregnant mother) ….is not realizing the dependency of coming to the clinic without passing through TBA. The main

thing for us is therefore to motivate TBAs, because for them when they pass through TBAs and the TBAs tell them if there is any problem…they will monitor them at home. The only thing that will bring them is when they get complications…or to get the clinic booklet. With ANC these people are yet to fully understand the importance of ANC….it is like...why should I go every month. It is like it has not sunk well.

Me: What do you think can be done to make it 'sink' or for them to real understand importance of ANC?

Gann: Not necessarily wait until they come here, but if outreach service could be enhanced, we go to the villages, we explain to them why ANC is important to all community members, more work is needed in this community.

Me: How can TBAs be motivated to bring the pregnant mothers to the clinic?

Gann: the NGOs use to give them some small incentives when they bring a mother to clinic and delivery in hospital…like 500Ksh (3.5 British pound) per mother…also workshops, but these has stopped and it affect their work.

Me: Do TBAs themselves understand importance of ANC clinic?

Gann: I think they do…at least for those who come for the workshop. When they go home, we tell them to bring the mothers to the ANC clinic, some TBAs helps us. Some pregnant mother hide pregnancy and will not come out to be seen but the TBA in that villages knows and they will tell them to go.

Me: Apart from above challenges you mentioned, are there others that you face in delivery ANC services?

Gann: The distance they walk from manyattas to hospital is a challenge…like now in rain season some areas are not accessible even for us…they also fail to come, only once…then may be the last one. If I ask them why, she will say her place is far, sometime I feel it is not only distance but they lack seriousness. The outreach service is not consistent…sustainable…it will depend on if the NGO that assist us has funding to do that.

Me: is there any cultural reasons for not attending ANC services?

Gann: No, for the period that I have been here…I haven't heard of cultural factors in ANC use.

Me: When the mothers come for the ANC clinic, do you also discuss the aspect of FGM and birthing options?

Gann: The first thing first……we have to encourage them to come to the clinic…some will tell us she has four children all delivered at home….so see no point…so I tell her let this be the first one that you will deliver in hospital…to see the difference between home delivery and hospital...which one is better.

Then with the TBA they like them to be present in the delivery room and we encourage that…with FGM I noticed the mother struggles real hard to push the baby out but she can't…and the women here do not like episiotomy...or if given they do not like it to be repaired, because of the process involved in repair..., we give them pain relief..they believe with FGM even if the episiotomy is repaired it would not be like before…..they refuse. FGM differ…there are some situation like big baby……. I have to give episiotomy…I try to explain to the mother that we have to save the baby...they fear pain...but I reassure her I will give pain relieve when repairing the episiotomy…they rush the mother here when labour fail to progress. From my experience I learnt that they deliver at home to show she is woman enough to bear the pain……if she cries or rush to hospital for delivery ……she will be laughed at……. some will just have to hold on to avoid embarrassment……. imagine some are first time mothers……at home delivery and has undergone FGM……. here all of them have undergone FGM. I think TBA have great role to play to discourage this……when she brings a mother for delivery and see she is pain free; she need to go tell the others to deliver in hospital.

Me: What do you think can be done to enhance ANC delivery in this community from the provider point of view, the community and the government?

Gann: For us care provider we need to do more in term of providing health education, give them more time, sit with them, develop good relationship, encourage them, not to be serious or rigid…involve them in their care, be more

friendly to the community. We need to involve more and make use of the people they value most like TBAs…you see like now the NGOs hold workshop for the TBAs. The County government need to use NGOs more, work through them…because here I could see NGOs does some work and people seems to trust…. NGO give them small incentives…like a small present for the child or the mother, like mosquito net, mama kit …such things encourages them to come to clinic and deliver in hospital. community recognize more and appreciate what NGOs does…because they believe they will bring service for them and something.

Me: What challenges do you face, you being not the native of this area?

Gann: one challenge is communication…I cannot understand everything they say, I have to have somebody to translate what they say and what I would tell them.

With that translation you feel your message has not been passed the way you want in the process some part of the message is omitted or not translated well…you see I communicate through the CHWs or my assistant at the health centre…but things are getting better…. since I am learning few words.

Me: Do you feel the community accept you, being not one of them, for example do the pregnant mother feels comfortable to give you information, thus affecting service delivery to them?

Gann: At first time, they were quite reserved…but as I continue sharing with them health education [laughing]……they start accepting me and sharing with me more information on themselves.

Me: How do you think our attitude as health care providers towards the mothers will influence ANC practice?

Gann: For example we are so busy sometime...how we handle these women some time can scare them away…. how we deal with them….some time you ask them questions….to me it is important questions but to them it is unnecessary…..we need to be sensitive of it. For example, asking them how many children they have, spacing children...they don't like such questions.

Me: How do you provide the mothers forum for asking questions when they attend ANC or do you as well ask them questions?

Gann: I ask them questions… like since the last visit if they had any problem…at least with that...she will open up and tell you one or two things...like 'I have been vomiting. I couldn't sleep well'……they do not ask questions most of the time.

Me: From your experience does the ANC attendance influence hospital delivery?

Gann: yes

Me: How?

Gann: like now, when she comes for ANC I tell her 'see you next time...do not fail to come'… while she is leaving…some do listen and deliver in hospital…I tell her to come when the labour start…how we handle them during antenatal clinic and at delivery matters…she will go and tell other women…. oh the nurse was good, I didn't feel any pain...it was good and some of them will then come, [laughing]……it thinks it is not so bad……though this people love delivery at home.

Me: Why do you think they like giving birth at home, what could be the reasons?

Gann: …ummh I haven't exactly known why…but for most of them since other are also giving birth at home…she does not want to be exceptional and to them it is ok to give birth at home and it is cultural.

Me: Do you have anything to add on about ANC attendance?

Gann: No

APPENDIX 8: STUDIES INCLUDED IN LITERATURE REVIEW

Appendix 7: Studies Included in Literature Review					
Author and year of publication	**Country/study location**	**Participants**	**Method used**	**Findings**	**Recommendations/ limitations**
Gcaba and Brookes, 1992	South Africa Referral Hospital Qualitative-case study	Pregnant women	10 interviews	Non-use of health facility was related to health system failure and socio-cultural factors-pregnancy as normal health status.	Unclear recruitment process Open communication with client. ANC offered at the time accessible to mothers. Health education on danger sign of pregnancy during ANC
Abrahams et al.,2001	South Africa Peri-urban	32 pregnant women	103 minimally structured individual interviews FGDs Observations	Knowledge influence attendance at ANC Perceived health needs, nurse-patient relation, booking system Economic issues influence attendance Women weighed expected benefits versus anticipated loss before seeking care Women concern about quality of care, provided little information	Attention required to address these barriers, improve health care providers' (HCPs) relationship with the women. Communication, listening to the women
Chapman, 2003	Mozambique Urban	Ethnography Interviews with Health care providers, women	83 participants	Provision of ANC not necessary reduce pregnancy-related risk as cultural beliefs about witchcraft, sorcery limit initial engagement with ANC clinic, start at 5th or 7th month, Attendance to obtain the ANC clinic card, insufficient prenatal care	Reducing economic vulnerability, social and economic marginalization amongst women may address ANC utilisation
Myer and Harrison, 2003	South Africa Rural primary care clinic	Pregnant women Explore reasons attend ANC clinic	229 interviews	Lack of knowledge on when to initiate ANC clinic, risk during pregnancy, Perceived no direct benefits of ANC except the clinic card, physical access barrier. Health care providers' failure to provide information	Data analysis insufficient Need for awareness
Mrisho et al., 2009	Tanzania Rural	HCPs Pregnant and post-natal mothers	Interviews 8 FGD	Late or Non-utilisation of ANC was attributed to several ANC visit required, insecurity, fear of operative procedures.	Need to address geographical and economic barriers to increase ANC use.

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Author and year of publication	**Country/study location**	**Participants**	**Method used**	**Findings**	**Recommendations/ limitations**
Pretorious and Greef, 2004	South Africa Mixed method	26 nurses 310 Pregnant women	Using questionnaires to explore ANC service utilisation	Lack of clear guidelines, protocols, and equipment to provide services	Unclear sampling strategies, sample size Data analysis insufficient
Byford-Richardson et a	Kenya Rural Qualitative	Women HCPs	22 Interviews 1 FGDs Explore barrier to accessing maternity care	Fear for HIV testing leads to underutilisation of maternity care Gender inequality and limited decision-making process Fear of maltreatment by HCPs	Need for research on exploring factors that define high mortality and morbidity
Pembe et al., 2008	Tanzania Qualitative	11 HCPs, 85 community members	FGDs,	Community members decide on referral of women to healthcare depending on their perception's seriousness of the conditions. Women have little say on the decision made Quality of care at healthcare influence referral, lack of transportation	Need for longitudinal studies to assess quality of care in peripheral health facilities.
Yakong et al., 2010	Ghana Rural	27 pregnant women	Interview, FDGs Participant observations	Healthcare providers' (HCP) relationship with women influence use of maternal health. Intimidation from HCP, lack of privacy	Promotion of basic relational practices between nurses and pregnant women structural changes to health clinics and nursing practices Need for consideration of women perspectives in improvement of services.
Kwambai et al., 2013	Kenya Rural	68 men	8 FGD of 8-10	Men have positive attitudes to ANC involvement but cultural norms, unsupportive health facility environment and negative attitude from HCP limits their participation	Need for increase awareness campaign, provision of joint HIV counselling and testing sessions for couple and couple friendly environment in the facility.
Vyagusa et al., 2013	Tanzania	157 TBAs Explore knowledge	Observation of their practices Interview	Trust with TBAs services Husband preference for TBAs services Formal healthcare service as curative, in case of complications	TBAs not translating the knowledge gained into practice. Need for TBAs training on danger signs of pregnancy Bring services closer to the village
Cheptum et al.,2014	Kenya	Mixed method 446 Women	FGDs Questionnaires	Economic and cultural barriers Health system limitations-staffs' attitudes, TBAs-available and cheaper	Lack of clarity-sampling, ethical approval Analysis inadequate

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Author and year of publication	**Country/study location**	**Participants**	**Method used**	**Findings**	**Recommendations/ limitations**
Mahiti et al., 2015	Tanzania Rural	15 women	FGD	Acknowledge ANC is beneficial but, easy accessibility of TBAs, health workers negative attitudes, geographical barriers	Improvement of services through; addressing accessibility, health worker attitudes
Mason et al., 2015	Kenya Rural	Pregnant women	8 FGDs consisting of 8-10 women	Women have positive attitudes to ANC, Fear of knowing HIV status and stigma, cost, heavy house burden leading to lack of time, lack of partner support	Health promotion to involve partner is needed.
Pafs et al., 2015	Rwanda Urban-Kigali	47 women (with near-miss event), 13 partners, 34 females, 26 male community members	Participant observation, interviews, FGDs	Preventive care not provided, Women not allowed to ANC without partner, supportive partner locked out after initial visits' These rigid requirements affected ANC attendance and supportive partners involvement denied	Need for flexibility to attend ANC with or without partner Supportive partners to be encouraged in ANC
Callaghan-Koru et al., 2016	Tanzania Sparsely populated area.	18 health centres participate. 11consultations per facility 11 pregnant women per facility.3 Interviews for healthcare providers (HCPs).	Interviews with pregnant women Observations of 203 ANC interventions	Inadequate communication noted during consultation, confusion on timing of ANC attendances, informal practises of turning away those who attend ANC in first trimester and without partner	Addressing the informal practises and poor inadequate communication would facilitate ANC attendances Need for research in dispensaries on women interactions with HCPs

Appendix 7: Studies Included in Literature Review					
Author and year of publication	**Country/study location**	**Participants**	**Method used**	**Findings**	**Recommendations/ limitations**
Munguambe et al., 2016	Mozambique urban/rural	Pregnant women, healthcare providers, For interviews: Elders, TBAs, traditional healers, mother in-law, healthcare providers	Interviews (13) FGDs (33)	Decision making, social, economic, and structural factors influence ANC use. ANC was only sort to resolve discomforts, obtain clinic card Husbands discourage wives revealing pregnancy early in gestation.	Promotion of saving scheme for financial needs, involvement of family members and community-based healthcare providers in maternal healthcare services.
Lowe et al., 2016	Gambia Rural	Women Impact socio-cultural factors to accessing maternal healthcare	5 FGDs with 50 women Questions: perceived health, difficulties keeping healthy in pregnancy	High prevalent of gender inequality-physical and emotional burden limit healthcare access Women engaged in heavy non-remunerated field work, little economic resources, little access to healthcare and decision making	Biasness in sampling and recruitment process.
Audet et al., 2016	Mozambique Rural	14	FGDs with community members, men, HCPs, TBAs on ANC uptake	Gender inequality-key barrier in decision to access ANC and role of male in ANC Socially unacceptable for men to engage in physical activities that entail women roles (e.g. attendance at ANC, household chores), which imply gender weakness and attract social embarrassment. Fear of HIV testing a key barrier to men involvement.	Need to change cultural norms to increase men participation
Lowe et al., 2017	Gambia Qualitative Rural	Explore role of men during pregnancy and childbirth Men, TBAs	6 Interviews 5FGDs	Socio-cultural factors as barriers to men involvement, gender roles gap	Men participation in ANC is needed

Appendix 7: Studies Included in Literature Review					
Author and year of publication	**Country/study location**	**Participants**	**Method used**	**Findings**	**Recommendations/ limitations**
Ogundairo and Jegede, 2016	Nigeria Central local area of Fulani (agro-nomadic people)	20 women 2 community leaders, 4 health workers	20 interviews 2 FGDs of 6 women	Pregnant women face socio-cultural challenges in seeking care such as privacy, culture of shyness and pain suppression, patriarchy system. Use of herbs during pregnancy as is cheap and easily available.	Provision of culturally sensitive care for women with diverse cultural background.
Owusu-Addo et al.,2016	Ghana A region with high prevalence of teenage pregnancy	28 teenage pregnant women, 1 midwife	Individual interview and focus group	Poor knowledge of pregnancy Relationship and community attitude toward teenage pregnancy affect health-seeking behaviours	Involvement of family and community to accept and support teenage pregnancy. Shift in maternal healthcare provision to establish antenatal care services. Creation of specify day that deal with teenage mothers only to meet their health needs.
Turinawe et al., 2016	Uganda Ethnography Rural	TBAs, Men Key informants	12 FGDs, 12 interviews, Observation	TBAs sensitise men through knowledge gained, thus influence ANC use, Advocate for women	Men trust TBAs could be use as strategy for community sensitisation on importance of maternal healthcare service use
Nesane et al., 2016	South Africa Qualitative	Explore their views of maternal healthcare	15 men interviews	Men lack knowledge on danger sign of pregnancy, Lack of participation Cultural barriers, ANC viewed as woman affair	Health promotion through community outreach program, waiting room for coupes and encouraging men participations
Roberts et al., 2015	Malawi Urban settings	20 pregnant women, 8 HCPs	In-depth interviews	Traditional pregnancy care practices prevail, HCPs' shared similar beliefs contributing to delay pregnancy disclosure, HCPs' discourage early ANC attendance	Programs, campaigns and initiatives that incorporate cultural practices and beliefs into healthcare services to increase ANC utilisation
Wilunda et al., 2017	South Sudan Rural -sub-County	14 focus group discussion (FGDs) with 169 pregnant women, 45 men, 12 community leaders and health workers,	14 FGD, 12 In-depth interviews Barriers to ANC use	Socio-cultural context conflict, heavy burden of domestic chores for women, husbands' negative influence to use of ANC, insecurity; misperceptions of benefits of ANC, low perceived risk of pregnancy-related complications, demand for services at the facility influence ANC use.	Large sample size Data analysis inadequate Addressing deeply entrenched social-cultural barriers to ANC.

Appendix 7: Studies Included in Literature Review					
Author and year of publication	**Country/study location**	**Participants**	**Method used**	**Findings**	**Recommendations/ limitations**
Wilunda et al., 2017.	South Sudan Rural Qualitative	TBAs Women HCPs Changing roles of TBAs and challenges	11 FGDs (TBAs), 6 with women Interviews with HCPs, village committees	TBAs accepted new roles to be linking women with healthcare, Community accept new TBAs' roles, resource challenges of linking women with healthcare including resources, communication, insecurity, lack of materials and supplies, insufficient incentives for TBAs, distance to nearest health facilities	Need to address the challenges faced by TBAs to enhance integration.
Dako-gyeke et al., 2013	Ghana Urban settings Qualitative	Pregnant women and postnatal mothers, community members, HCPs,	6 FGDs 13 interviews Explore, beliefs and knowledge about pregnancy and health-seeking	Cultural beliefs related to sinister beliefs made women to seek both traditional (herbalist, TBAs, spiritual) and modern care.	Need to address the cultural barriers to maternal healthcare service use. ANC package should also focus on addressing fear associated with pregnancy care.
James et al., 2012	South Africa Urban	Teenage Pregnant women	12 interviews	Clinic environment unfriendly, embarrassing and intimidating, Insensitive to their teenage needs Not care for like older women These led to non-attendance	Seeking for separate waiting area and clinic day. Skilled midwives to deal with needs for teenage pregnant women
Kululanga et al., 2012	Malawi-rural Qualitative	108 participants Men, women TBAs, elderly women and other key stakeholders (60 women, 40 men)	Men involvement in maternal health Interviews FGDs	Men felt pressurised to attend ANC, Participants perceived men participation is as result of; government policy, foreign concept, strategy for women to use service Attendance has benefits (HIV testing) Women without husband not treated fairly at the clinic, priority given to couples. Their roles are socially constructed-no need for men to accompany women to ANC	Need to address cultural issues related to men attendance at ANC. Maternal healthcare service should be gender sensitive.
Singh et al., 2014	Uganda Rural	35 men and women	5 FGDs, 35 Questionnaires	Pregnancy and childbirth related issues believed to women's responsibilities Men's responsibilities perceived as providing for the family	Gap in men involvement and participation in pregnancy Unclear sampling, recruitment strategy.

Appendix 7: Studies Included in Literature Review					
Author and year of publication	**Country/study location**	**Participants**	**Method used**	**Findings**	**Recommendations/ limitations**
Morgan et al., 2017	Uganda Urban-rural Questions: impact of gendered power relationship on maternal healthcare.	Women Community members Men	FGDs (10-15 participants)	Resources challenges key barrier, Gender roles burden-women heavy workload, lack of men involvement. Men negative attitudes towards fatherhood, domestic violence towards women during pregnancy	Unclear data collection strategy.
Pell et al., 2013	Ghana, Kenya, and Malawi qualitative	645 participants including: Pregnant women, opinion leaders, HCPs, and community members	FGDs, interviews, observations	Attendance at least once To check foetal status or monitoring progress, need for ANC card Attendance limited due to resources limitation, lack of knowledge, fear of maltreatment. Women socio-economic status influence attendance at ANC Multipara do not comply with early ANC attendance.	Consideration of context specific factors influenced early ANC initiation, hence need consideration Need for supporting multipara
Ganle et al., 2014	Ghana Mixed method	185 women (pregnant and postnatal), 20 HCPs,	6 FGDs, Questionnaires Impact of resource limitation of utilisation of maternal healthcare services	Intimidation, threat, long waiting time for consultation, socio-economic factors, and cultural insensitive approaches by HCPs' influence women experiences.	Need to address HCPs' attitudes suggested to enhance use of services.

APPENDIX 9: QUALITY ASSESSMENT FOR QUALITATIVE RESEARCH (CRITICAL APPRAISAL SKILLS PROGRAMME, 2017)

Key

Screening questions

Clear statement of the aims	Statement (stat)
Appropriate qualitative methodology?	Methodology (Meth)
Research design appropriate?	Design (Des)
Recruitment strategy appropriate?	Recruitment (Rec)
Data collection sufficiently addresses the research issue?	Data collection (DC)
Relationship between researcher and participants been adequately considered?	Researcher (Res)
Ethical issues taken into consideration?	Ethics (Eth)
Data analysis sufficient and rigorous?	Data analysis (DA)
Clear statement of the findings?	Findings (Find)
How valuable is the research?	Valuable (Val)

Responses: Y = Yes, N = No, UC = Unclear, V = Valuable

	Stat	Meth	Des	Rec	DC	Res	Eth	DA	Find	Val
Pell, et al., 2013	Y	Y	Y	Y	Y	Y	Y	N	Y	V
Byford-Richardson et al., 2013	Y	Y	Y	UC	Y	Y	UC	Y	Y	V
Wilinda et al., 2017	Y	Y	Y	Y	N	Y	UC	N	Y	V
Lowe et al., 2016	Y	Y	Y	Y	N	Y	Y	Y	Y	V
Singh et al., 2014	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Cheptum et al., 2014	Y	Y	Y	UC	N	Y	Y	N	N	UC
Kululanga et a., 2012	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Dako-gyeke et al., 2013	Y	Y	Y	Y	N	Y	UC	Y	Y	V
Nesane et al., 2016	Y	Y	Y	Y	N	Y	Y	N	N	V
Chapman, 2003	Y	Y	Y	Y	N	N	Y	N	N	V
Abrahams et al, 2001	Y	Y	Y	Y	Y	N	Y	Y	Y	V
Gcaba and Brooke	Y	Y	Y	UC	Y	Y	UC	Y	Y	V
Wilunda et al, 2017	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Vyagusa et al., 2013	Y	Y	Y	Y	N	Y	UC	Y	Y	V
Yakong et al, 2010	Y	Y	Y	UC	Y	Y	UC	Y	Y	V
Callaghan-Koru et al., 2016	Y	Y	Y	Y	Y	N	Y	Y	Y	V
Owusu-Addo et al, 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Ogundairo and Jedede, 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Pafs et al, 2015	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Myer and Harrison, 2003	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Munguambe et al, 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Mason, et al, 2015	Y	Y	Y	Y	Y	Y	Y	Y	Y	V
Mahiti et al, 2015	Y	Y	Y	Y	Y	Y	UC	Y	Y	V
Kwambai et al, 2013	Y	Y	Y	N	N	N	Y	Y	Y	V
Roberts et al., 2015	Y	Y	Y	Y	Y	Y	UC	N	N	V
Turinawe et al., 2016)	Y	Y	Y	Y	Y	N	Y	N	Y	V
(James et al., 2012)	Y	Y	Y	Y	Y	N	Y	Y	Y	V
Mrisho et al., 2009	Y	Y	Y	Y	Y	N	UC	Y	Y	V

APPENDIX 10: SEARCH STRATEGY

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SEARCH STRATEGY

Set No.	Searched for	Databases	Results
S1	(Nurse OR midwives OR skilled birth attendants OR professional health worker) AND (Perceptions OR perspectives OR belief OR knowledge OR experience OR attitude) AND (Barriers OR facilitators) AND (Antenatal care services OR antenatal interventions OR antenatal assessment OR antenatal counselling OR maternal healthcare OR evidence based interventions OR community based services) AND (pastoralist communities OR marginalised community OR nomadic community) AND (Qualitative interviews OR focus groups OR content analysis OR thematic analysis OR ethnographic research) AND (Qualitative OR meta-synthesis OR mixed method studies)	Applied Social Sciences Index & Abstracts (ASSIA)	694*
S2	(Men OR spouses OR husband OR partner OR male partner OR intimate partner OR male) AND (Perceptions OR perspectives OR belief OR knowledge OR experience OR attitude) AND (Barriers OR facilitators) AND (Antenatal care services OR antenatal interventions OR antenatal assessment OR antenatal counselling OR maternal healthcare OR evidence based interventions OR community based services) AND (pastoralist communities OR marginalised community OR nomadic community) AND (Qualitative interviews OR focus groups OR content analysis OR thematic analysis	Applied Social Sciences Index & Abstracts (ASSIA)	986*

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	OR ethnographic research) AND (Qualitative OR meta-synthesis OR mixed method studies)		
S3	(Traditional midwife OR community midwife OR traditional birth attendants OR traditional birth assistant OR community birth helper) AND (Perceptions OR perspectives OR belief OR knowledge OR experience OR attitude) AND (Barriers OR facilitators) AND (Antenatal care services OR antenatal interventions OR antenatal assessment OR antenatal counselling OR maternal healthcare OR evidence based interventions OR community based services) AND (pastoralist communities OR marginalised community OR nomadic community) AND (Qualitative interviews OR focus groups OR content analysis OR thematic analysis OR ethnographic research) AND (Qualitative OR meta-synthesis OR mixed method studies)	Applied Social Sciences Index & Abstracts (ASSIA)	118*
S4	(Mother in-law OR husbands mother OR spouse mother) AND (Perceptions OR perspectives OR belief OR knowledge OR experience OR attitude) AND (Barriers OR facilitators) AND (Antenatal care services OR antenatal interventions OR antenatal assessment OR antenatal counselling OR maternal healthcare OR evidence based interventions OR community based services) AND (pastoralist communities OR marginalised community OR nomadic community) AND (Qualitative interviews OR focus groups OR content	Applied Social Sciences Index & Abstracts (ASSIA)	180*

	analysis OR thematic analysis OR ethnographic research) AND (Qualitative OR meta-synthesis OR mixed method studies)		
S5	(Antenatal woman OR antepartum woman OR prenatal woman OR expectant woman OR pregnant woman OR pregnant girls.) AND (Perceptions OR perspectives OR belief OR knowledge OR experience OR attitude) AND (Barriers OR facilitators) AND (Antenatal care services OR antenatal interventions OR antenatal assessment OR antenatal counselling OR maternal healthcare OR evidence based interventions OR community based services) AND (pastoralist communities OR marginalised community OR nomadic community) AND (Qualitative interviews OR focus groups OR content analysis OR thematic analysis OR ethnographic research) AND (Qualitative OR meta-synthesis OR mixed method studies)	Applied Social Sciences Index & Abstracts (ASSIA)	201*

* Duplicates are removed from your search and from your result count.

APPENDIX 11: INTEGRATION OF FINDINGS FROM ACROSS GROUPS (WOMEN, MEN, TBAS, AND NURSES)

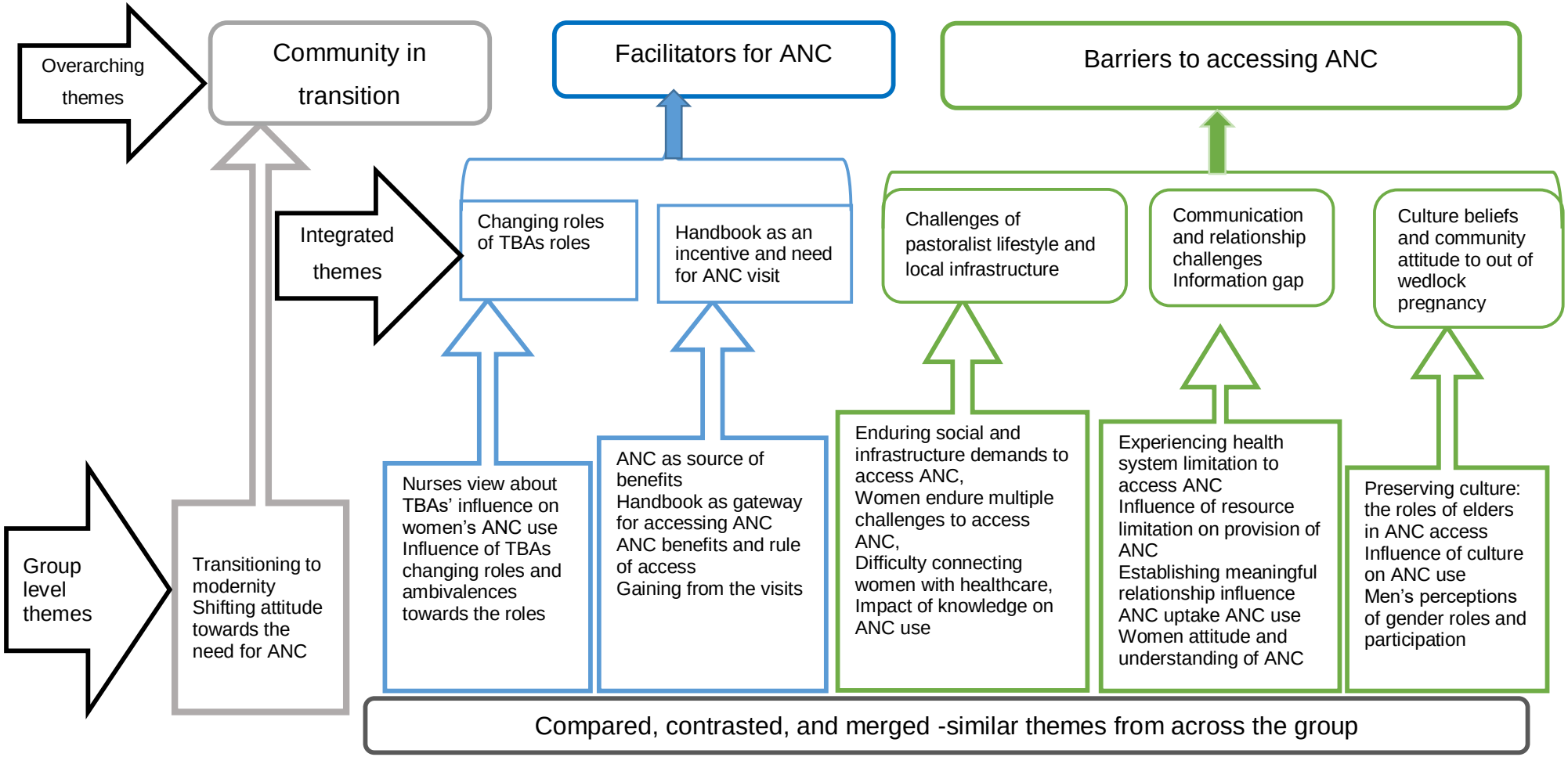
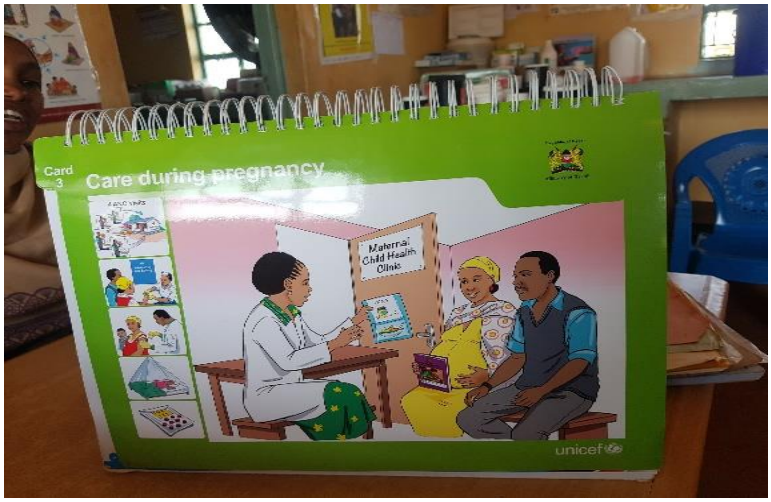


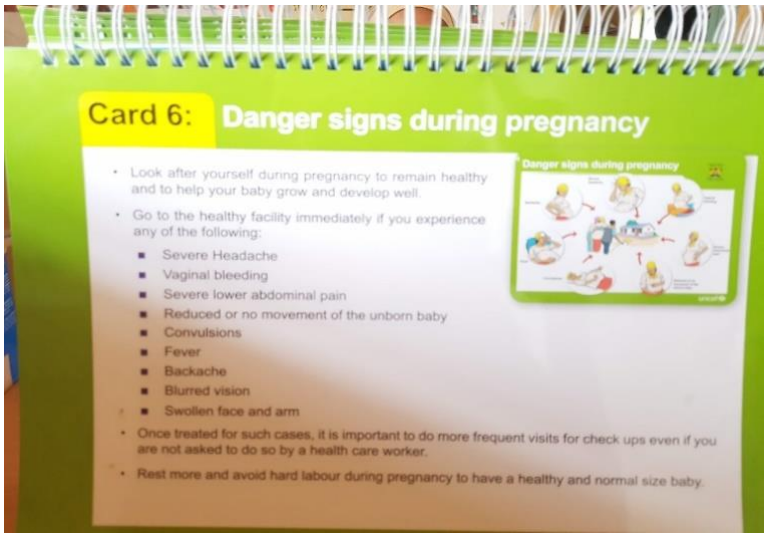
Table 16: Number of participants recruited per village/dispensaries

Participants	FGDs	Interviews	Villages	Number per village	Dispensaries
Pregnant women		10	From all six villages	Village 1, 2,3 and 4 = 2 each Village 5 and 6 = 1 each	
Postnatal mothers		6	1, 2, 3, 5 and 6	Village 1,2,3 and 5 = 1 participant each Village 6 = 2	
Husbands	4 (18 participants)		1, 2, 3 and 4	Village 1 and 4 = 5 participants each Village 2 and 3 = 4 participants each	
Traditional birth attendants	4 (15 participants)		1,2,3 and 6	Village 2 and 6 = 5 participants each Village 1 and 3 = 4 participant each	
Nurses		7			4 dispensaries and I health centre
Total = 58 participants	35	23			

APPENDIX 12: PREGNANCY RELATED HEALTH INFORMATION

Flipchart with pregnancy-related health messages





APPENDIX 13: MARSABIT COUNTY MAP

