Understanding antenatal care utilisation amongst pastoralist communities: A focused ethnographic study in Kenya

Abstract

Background: Provision of high-quality ANC improves maternal and child health outcomes**.** Pastoralist communities face unique challenges in accessing healthcare associated with a nomadic marginalised lifestyle and have high rates of maternal morbidity and mortality. There is a minimal evidence on ANC use globally amongst this group. In order to develop optimal ANC services for pastoralist communities, there is an urgent need to understand pastoralist women's current use of antenatal care services.

Aim: To explore the experiences of antenatal care amongst pastoralist communities in Kenya in order to identify key barriers and facilitators of antenatal care (ANC) uptake.

Design: A focused ethnographic qualitative study, underpinned by a philosophy of critical realism.

Methods: A total of 58 participants (women, husbands, traditional birth attendants and nurses) were included. Data were collected using interviews, focus group discussions, and observation. Data was collected for six months in six villages and five health facilities in a pastoralist region of Northern Kenya. Data analysis employed inductive thematic analysis and retroduction to identify concepts, structures and mechanisms that influenced antenatal care use.

Results: Pastoralist women's antenatal care experiences and use were linked to two main causal mechanisms: a) government policies that incentivised ANC use by linking the provision of the baby's health and citizenship records to ANC uptake and by encouraging traditional birth attendants to adopt defined referral roles; b)multiple structural barriers that impeded consistent ANC uptake, including pastoralist lifestyle, cultural barriers, health system constraints and a gap in information sharing. The dissonance between these two mechanisms led to partial, sub-optimal utilisation patterns of ANC.

Conclusion: Government policy created an impetus for the pastoralist community to use contemporary healthcare services. At the same time, multiple barriers impeded access to services. This explains the partial use of ANC services among pastoralist community. The findings throw doubt on the feasibility of WHO ANC guidelines that

recommend 8 contacts during pregnancy. Rather, the study shows there is a need to work collaboratively with communities to develop context specific models of care.

Key words: antenatal care', 'qualitative studies', 'pastoralist', barriers and facilitators, focused ethnography

1.0 Introduction

Antenatal care (ANC) is one of the most critical components of maternity care that ensures a healthy pregnancy and safer childbirth (Ekabua et al., 2011). WHO has produced a toolkit to assist the country-specific contextualisation for implementing WHO's recommendations on ANC for a positive pregnancy experience (Barreix et al., 2020). This is particularly important in a context where maternal health is generally poor such as in Kenya, where this study is located (Mason et al., 2015, Moller et al., 2017, WHO, 2016). A recent systematic review with views of women and healthcare providers from high, middle and low income countries including Kenya has highlighted socio-cultural issues, health system constraints, and local infrastructure including distance as major barriers to ANC use (Downe et al., 2019). However, little is known about the ANC experience of pastoralist communities generally (El Shiekh and van der Kwaak, 2015, Ogundairo and Jegede, 2016) and specifically in Kenya.

Why is this research necessary?

- ANC is critical pillar that increases the potential for skilled care and improve maternal and child health outcomes, yet little is known about pastoralist women's ANC experiences.

What are the key findings?

- Pastoralist communities are in a period of transition towards greater social inclusion and use of mainstream health and other government systems and services. Government policies that link ANC use to receipt of child health records and access to citizenship benefits act as a powerful incentive to seeking ANC care at least once.
- Traditional birth attendants can have an important role as referral agents, bridging traditional and contemporary healthcare practices
- The pastoralist lifestyle poses many structural obstacles to accessing ANC, leading to sub-optimal patterns of partial service utilization

How the findings would influence policy/practice/education and research

- WHO guidelines for ANC care that recommend 8 contacts may not be feasible in pastoralist communities
- Collaborative research and service development is required to develop and evaluate context specific ANC interventions

Pastoralist communities generally keep domestic livestock as means of their livelihood. This practice leads to migration from place to place in search of pasture and water for their animals. Pastoralist communities in Kenya and other African countries face longstanding marginalisation in terms of access to healthcare services due to their geographical settings (Jenet et al., 2016, Kirupi and Ridgewell, 2008, Nyariki and Amwata, 2019). The vulnerability of pastoralist communities is further compounded by climate change, specifically persistent dry weather patterns, which diminishes their livelihood options leading to increased poverty, endemic tribal conflicts, and increasing environmental conservation, which takes up part of their

grazing land (Downie, 2011). High level of mobility among the pastoralists is likely to make healthcare access a critical challenge, however, empirical evidence is lacking.

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). Marsabit county has the fourth highest maternal mortality and morbidity at 1,125 per 100,000 live birth and the highest teenage pregnancy rates at county level, understanding the barriers and enablers to healthcare service use among the pastoralist may highlight issues specific to this county.

Most published studies that have investigated barriers to hospital delivery used questionnaires (Biza and Mohammed, 2016, Mekonnen et al., 2012, Wako and Kassa, 2017). This paper reports the pastoralist communities understanding of ANC use, and barriers and enablers to accessing ANC services.

2.0 The study

2.1 Research questions

The research questions were:

1. What are the pastoralist community perspectives of, and experiences of ANC services use?
2. What are the factors influencing the use of ANC services?
3. To identify possible ways to enhance the use of ANC services amongst pastoralist community

2.2 Study design

The study adopted Critical realist philosophy and a focused ethnography methodology. This was to identify underlying causal mechanism answering why pastoralist women attend or do not attend ANC clinic and to provide practical policy recommendations on how to address the social problems identified(Fletcher, 2017). A COREQ (COnsolidated criteria for REporting Qualitative research) was used as a guide in reporting this study's finding for the journal **(**Tong A, Sainsbury P, & Craig J, 2007).

2.3 Study setting

The study was conducted in Marsabit County, where 80% of the populations are pastoralist. The research sites were six villages (villages) and five dispensaries in the periphery of Marsabit County. Most of the villages are over 40 kilometres out of small town and the travel time to the nearest dispensary takes 3-4 hours on foot given the harsh terrain. A dispensary is the lowest level of healthcare service provision in the public health system; the first point of contact with the patients/clients. A registered nurse is in charge of providing a range of services including antenatal care services to the women at the dispensary.

2.3.1 Sample and participant selection

Women with experience of childbirth, men, and traditional birth attendants, and nurses from the dispensaries were recruited purposively (Higginbottom, 2004, Roper and Shapira, 2000). Participants were recruited through Community Health Workers (CHWs) who are familiar with the village setting through the most appropriate means. The nurse manager helped in the recruitment of the nurses from the dispensaries. For inclusion criteria see Table 1.

2.4 Ethical considerations

Ethics Committeess approvals were obtained. During the process of consenting, some participants preferred to provide verbal consent and did not wish to provide a thumbprint; their requests were respected. Written consent was obtained from the nurses.

2.5 Data collection

The choice of individual interviews for pastoralist women was considered appropriate due to socio-cultural orientation that rendered them generally shy to express their feelings and diminished autonomy (Eneyew and Mengistu, 2013, Ogundairo and Jegede, 2016). The choice of men and TBAs was pragmatic due to their influence on women use of healthcare services (Munguambe et al., 2016), long distance between the villages and financial limitation to travel multiple times to the villages for interviews (Nyumba et al. 2018). The choice of interviews for the nurses was informed by nature of their work since there was only one nurse per dispensary and it was not practically possible to bring all together for FGDs.

Data collection included individual interviews, focus group discussions (FGDs) and participants observation (PO). Multiple strategies enabled triangulation of data to compare different views, in-depth understanding and enhance integrity (Creswell et al., 2007, Crotty, 1998, Dew, 2007).

Interviews for participants in the villages were conducted in the local language and in English for nurses. Interviews for women were held in their huts for their convenience and privacy, while FGDs were conducted in makeshift huts in the villages for men and TBAs.

Observation involved engaging in and assisting nurses with a few activities such as weighing as instructed by the nurse while observing the daily routine and behaviours (Roper and Shapira, 2000, Zhao and Ji, 2014), as they continued with ANC consultations. This helped in triangulation of data sources.

2.6 Data analysis

Thematic data analysis in this study followed an inductive approach (Braun & Clarke, 2006) and iterative, cyclic, and self-reflective process (Higginbottom, 2004, Pope et al., 2000). Data were transcribed in local dialects and translated in English to ensure quality, accuracy and to minimise the translation errors. The research assistant helped in translation of data from local dialects to the English language (Regmi et al., 2010, van Nes et al., 2010) and co-facilitation of focus group discussion. Data were organised into five groups including women's and nurses' interviews, men and TBAs FGDs, and participant observations, and uploaded to NVIVO 12 software. All transcripts were read through several times to familiarise and to make sense of data gathered (Maguire and Delahunt, 2017). Initial coding led to the identification of concepts and then categories which formed themes either barriers or facilitators of ANC amongst pastoralist community. Further analysis through retroduction identified underlying causal mechanisms and structures that answered the research questions (Fletcher, 2017).

2.7 Maintaining rigour and trustworthiness

Trustworthiness and reflexivity are critical in ethnography (Berger, 2015, Cruz and Higginbottom, 2013) and were established through purposeful sampling, multiple data collection techniques to corroborate evidence and triangulate the different perspectives (Nicholls, 2009, Anney, 2014). Credibility was enhanced through an iterative process of data analysis and retroduction process for a deeper understanding of the underlying causal mechanisms. Born to a pastoralist family I have always been interested and passionate about improving women's health, particularly among under-served ethnic minority groups. This interest was further driven by research gap among pastoralist as discuss in (section 1.0). However, I continuously acknowledged my positionality and maintained reflexivity through keeping memos to maintain quality, and reflecting on the research process (Berger, 2015). The research assistant's translated transcripts were compared, to check for differences in translations and we held debriefing session about translation.

3.0 Findings

3.1 Characteristics of participants

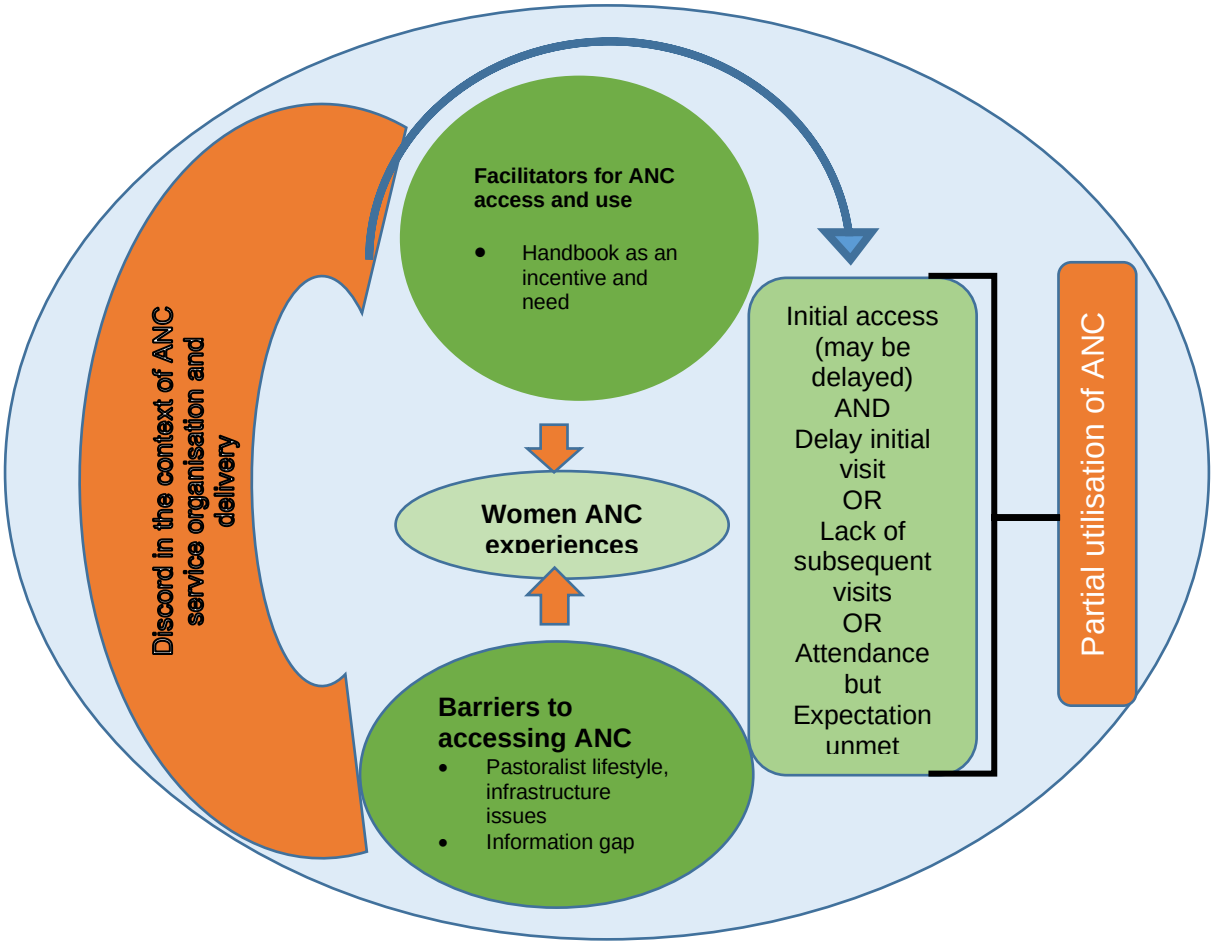
All the participants had none or only a few years of schooling, except for the nurses,. With the exception of one, all the nurses interviewed had a basic diploma level of training, which in the Kenyan context would allow them to provide maternal healthcare services and conduct normal delivery.

3.2 Partial utilisation of ANC

Partial utilisation of ANC means that pastoralist women do access ANC clinics but do not make full use of ANC services due to ambivalences and structural barriers.

The pastoralist women's utilisation of ANC are reported as partial. This partial utilisation is attributed to two key causal mechanisms including: (i) the government policy as manifested in community need for the handbook; this document that enables social inclusion and provides a gateway to accessing a range of government services, and traditional birth attendant as referral agents between community, hence contributing to ANC attendance, (ii) multiple structural barriers that impede subsequent visits. These barriers include pastoralist lifestyle, roles and responsibilities, culture, resources limitation, and inadequate information sharing. Partial utilisation of ANC is explained by the dissonance between these two causal mechanisms, which means that despite the government policies influencing the women to use the services, the multiple access barriers could not allow subsequent utilisation of the services (see Figure 1). The Figure provides a summary of factors influencing pastoralist women ANC use that led to partial ANC use as will be discussed in the sections that follows (3.2.1& 3.2.2)

Figure 1: ANC partial utilisation model amongst pastoralist women



3.2.1 The handbook influencing access to health services.

When talking about ANC use, the need for the handbook emerged as the most important influencer among most of the participants because of the perceived benefits associated with the handbook that leads to health, economic, and social inclusion. The handbook has an integrated information on maternal and child health are used as patient record book by women and HCPs to monitor pregnancy and child health progress until when the child is five years of age The handbook contributes to initial access according to most of the participants due to associated benefits including, future access to a child's immunisation and access to other services (e.g. referral letter, food aid) and gateway to general citizenship rights (birth notification to obtain a birth certificate for schooling). For all women in this study, the latter was an extremely

important reason for making effort to attend ANC to obtain the handbook amidst all the access challenges. The perceived benefit is largely linked to the unborn child's future, and that made almost all the women make efforts to obtain it even if attending ANC clinic only once. There is a strong perception among all the women that in the contemporary world, the need for the birth certificate for child schooling is a priority of which the handbook is needed.

> *'To get the clinic handbook is one important reason why many of us go to the clinic and you cannot get unless you go there'. You see how far our village is, but if I will not have gone for a pregnancy clinic my children will not get a birth certificate. Eeh…these days, this thing (birth certificate) is very important not like our parents' days' (Quri, 38 years).*

Similarly, for many women, attendance at ANC was viewed as essential due to the fear of what would have happened if they did not obtain the handbook and delivered in hospital. The fear of being denied the services, leads to initial ANC access.

> *'If I don't go to the clinic, not delivered in hospital and only bring the baby for immunisation as some women do, the nurse will ask for the clinic booklet and if you said I do not have, she will threat you about issuance of notification for birth, yes she will immunize the child…but threaten, she will agree [laughing], we fear this, to avoid problems, we go (Wari,31 years).*

Echoing women's views, some TBAs added that failure to attend ANC and obtain the handbook during pregnancy may require negotiation by village elders for women to access postpartum care and benefits. Having the handbook is an identifier that the woman has attended the ANC clinic. Besides being a strategy that drives women to use the ANC clinic, some TBAs also felt that the rule was meant to create peer influence for other women who did not attend clinic. However, most TBAs reiterated that the child would be immunised, but the woman warned not to fail to attend ANC clinic and deliver in health facility in future. Some TBAs also added that the strategy has yielded some benefits as some women attended ANC clinic for fear of consequences and ensure that they obtain the handbook. This demonstrates that even

though the rule appeared coercive and may have failed to consider other underlying contextual barriers, it still influences attendance at ANC positively.

> *'So, the village elders intervene and ask the nurse to immunize and the woman is warned not to fail to come for the clinic next time. This is a means to make them go for the clinic, what do you think? Some do attend. The woman will be asked a lot of questions about why she didn't have handbook, why she didn't go for clinic, she will be forgiven, but a strong warning will be given not to repeat, yes the baby will be immunized but she will be given a warning, they fear and some attend, the idea is to make them not fail to come to the clinic and to tell others the same.' (TBAs FGD4, P5)*

Nurses also confirmed the above observations, reporting that the handbook is a passport to accessing healthcare services. Nurses reported emphasising to the women the importance of the handbook and need to have it always, particularly when travelling to different location for continuity with the services, e.g. in another health facility, as the handbook has their ANC information.

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

Similarly, the handbook was seen by many women as a means to access other government services including referral to another health facility 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.

> *'if I did not go to the 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 the clinic and they do not have my information, they will not agree without clinic booklet, they will help but……..it is problem… we go to get the booklet' (Gure 26 years,).*

Women seemed generally to make an effort to attend ANC, at least once. Interestingly, nurses related this to the desire for the handbook for future benefits for the unborn child rather than the importance of ANC per se. Hence many nurses believed, some women would not maintain attendance after the handbook is obtained and foetal position confirmed.

> *'some women come for the handbook and check their baby's position and status, after they get that handbook you will not see them again, they only want to get the handbook, because when they come for delivery they are asked for the handbook, and for immunisation' (Wati, 35 years, HC)*

However, although the practical benefits of the handbook influenced the initial access, there was also concern among many women about information in the handbook including information on nutrition, danger signs of pregnancy and information on preparation for childbirth, intrapartum and postpartum care which were not shared.. As explained by Mulii a young pregnant woman, many women desired for the information in the handbook, but this was limited by the nurse's failure to explain 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, given their inability to read. Nonetheless, women still valued the practical benefits associated with the handbook and made an effort to attend ANC to obtain.

> *'There is a lot of information and pictures in it (this-showing me the handbook), but the nurses do not tell us at all. I haven't 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 29years).*

3.2.2 The challenge of pastoralist lifestyle on ANC access

The study found that some women desired more regular attendance at ANC, however, this was negatively influenced by heavy domestic chores coupled with the pressure of pastoralist way of life. Such role pressure created a challenge for many women to return to the ANC clinics. In addition, the perception that these animals are the source of their livelihood, thus attending to them is prioritised, which undermines regular ANC visits.

> *'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 the only source of my livelihood' (Mulii, 29 years).*

Men also identified that women's role to attend to the animals, particularly during the dry season when men travel further afield, affected their attendance at ANC. These perceived challenges are further compounded by men's absence either due to cultural factors or lack of knowledge.

> *'As pastoralist, even our wives do not have time, when we are away with the larger herds, even if they want to go to this clinic many times…women are always busy…watering, collecting grasses, and feeding animals, and still they perform other house chores…see…its hard (Men, FGs2, FGD4).*

As described by some TBAs, women sometimes follow the herds during migration in order to meet their nutritional needs (e.g. milk from the animals), hence affecting their ability to attend the ANC clinic. TBAs observed that in such a situation some women only return to the village for childbirth or delay attendance at ANC or only once in the last trimester. This migration also affects the provision of referral to healthcare.

> *'You see some pregnant women follow animals that migrate from place to place to get some milk and they do not come to the ANC*

clinic, or come when almost about to give birth. They are far in the field (fora).' (TBAs FGD2, P5).

A typical pastoralist lifestyle is associated with village migration in search of pasture and water for their livestock. This means moving further away from the closest health facility, hence impacting on early engagement with healthcare. Nonetheless, according to the nurses, even when the pastoralist lifestyle seemed to cause major impediments, women would still make effort to visit the ANC clinic at least during the last trimester to confirm the pregnancy and obtain the handbook.

'If they come in the third trimester, they cannot complete that fourth visit, which is why we have high number of the fourth visit than the first visit to be provided services. The reason they give is moving place, pastoralist migrate frequently for pasture and water at least to check pregnancy and get the book (Nasibo, 31 years, Disp 4).

Another lifestyle-related factor, often mentioned by TBAs, was the common practice of early marriage among the pastoralist community. This traditional practice was perceived to contribute to delays in early ANC visits, particularly among young first-mothers due to shyness, lack of knowledge, and fear to disclose pregnancy. The fear was associated with being seen to be pregnant while still young. However, even though the latter makes the referral roles more difficult, many TBAs reported encouraging them to use the health facility.

'It is the responsibility of the women to attend the clinic, 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 women here hide the pregnancy and it is not easy for us to know they are pregnant.' (TBAs FGD4, P2)

Further, all the participants commented on distance as a key issue for the pastoralist women to accessing ANC. Besides, the unfavourable weather pattern (e.g. drought)

was an additional stressor as women struggle to meet activities of daily living before finding opportunity for ANC visit.

> *Drought is making things difficult for us and our animals. Our village is far from the facility, we are in the middle of nowhere, no water source nearby our women are always very busy fetching water whether she is old woman, expectant or lactating, such domestic home-chores make it impossible to attend clinic always (Men, FGs4, FGD1)*

Another challenge related to the lack of means of transport. Many participants, including nurses, indicated that means of transport was a major challenge for ANC attendance. The only available means - trucks were often unreliable, expensive, and unsuitable for pregnant women. Nurses expressed that for a community that is already struggling with other contextual challenges such as distance and their pastoralist lifestyle, such experience diminish their desire to continue with ANC use.

> *'A mother with a twin pregnancy and at term, in those villages, there no means of transport and the few means of transport is a truck which they cannot afford and not comfortable, coming for clinic all the way, she may want to but is a real struggle… that leads to failure to come back.' (Fatu, 28 years, Disp. 3).*

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 preparing to travel to the dispensary on foot, others to the field to fetch fodder for the animals. Most of them were 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. Because of this, some nurses reported feeling the need to provide for the women as much as possible in addition to confirming the baby's position, 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 or some mothers from this area leave home at around 4 am 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)

4.0 Discussion

The Figure 1 above 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.

Regardless of the challenges in their environment, the pastoralist community in this study reported that women would attend ANC clinic - even if only once. This desire was overwhelmingly attributed to the perceived need for the handbook due to its associated benefits. Obtaining the handbook for the future benefits of the unborn child including childhood immunisation and a birth certificate for schooling was found to be a very important consideration for making effort to attending the ANC clinic. This is unlike in previous generations where this was not a requirement for schooling. In addition, the handbook was found as a gateway to accessing mainstream government services including social benefits and healthcare services. Although previous studies have linked the need for the handbook to accessing hospital services, it was mainly for hospital delivery and access in case of pregnancy related emergencies (Abrahams et al.2001, Munguambe et al., 2016, Pell et al., 2013).

Previous studies mostly from Asian countries associated the handbook with benefits through increased attendance at ANC, influence on subsequent ANC visits, as a health promotion tool, monitoring maternal physical and mental health, reduction in childhood mortality, positive relationship with HCPs, and educational benefits for less educated women (Kitabayashi et al., 2017, Mori et al., 2015, Takeuchi et al., 2016). However, the current study did not identify such benefits, except as a gateway to accessing practical gains and future childhood benefits. Nonetheless, the handbook seems to play a critical role in maternal healthcare services utilisation. Therefore, its usefulness in terms of educational roles should be emphasised for pastoralist women, and that may enhance attendance at ANC, particularly subsequent ANC visits, as established in recent cluster randomised controlled trial in a rural setting in Indonesia (Osaki et al., 2019).

The findings of the present study highlighted that although women desired for the information in the handbook, nurses did not share the information, and women's low literacy level prevented them from using information presented in the English language. Therefore, translation of the handbook from the English language to local or indigenous language and if combined with an informative illustrations might impact women's knowledge and uptake of ANC (Kawakatsu et al. 2015, Pratiastuti and Ahmad, 2018).

Women in this study desired to continue with the ANC visits, however, this desire was significantly limited by the challenges within their context, in particular pastoralist lifestyle. Healthcare access is a challenge for rural residents due to multiple structural barriers including geographical settings, socio-economic and cultural factors (Do et al., 2017, Mugo et al., 2015, Ogundairo and Jegede, 2016). However, for women in this study, their pastoralist lifestyle presented additional challenges. The attributes of this pastoralist way of life of managing and moving with their animals, traditional practices of early marriage, cultural practices and their settings, all hindering regular attendance of ANC clinics. These activities as related to pastoralist lifestyle take priority since the animals are considered as means of their livelihood and they organise their lives around the needs of their animals (Huka et al., 2001, Kirupi and Ridgewell, 2008). These factors diminish women's agency, contributing to partial utilisation of ANC.

In rural settings, women are reported to attend ANC only once (Jacobs, et al., 2018), meaning that the existing static form of healthcare service does not support the healthcare needs as for the pastoralist community in this study. This, therefore, suggests that achieving the eight ANC contacts as recommended by WHO (WHO, 2016) is not achievable in the pastoralist community unless context specific strategies are established. This was strongly established in current study as women were found to struggle to access health care services due to challenges of their pastoralist lifestyles and unavailability of the health facilities within their reach. Therefore, Pastoralist women could benefit from a context specific approach that would deliver comprehensive ANC services to the villages through mobile outreach services that have been found successful in a rural (Jacobs et al. 2018, Yu et al., 2017). Meanwhile, as women struggle to make the initial visit, approach such as 'one-stop-shop' that

aimed to provide comprehensive services during initial visit (Jacobs, et al., 2018), could be an ideal option for the pastoralist community. This then could be followed up through mobile outreach services, remote mobile phone consultations and mass media health promotion such as radio programmes (Entsieh et al., 2015, Feroz et al., 2017, Lund et al., 2012). Task shifting where available human resources such as CHWs and TBAs are utilised (Ministry of Health Kenya, 2017, WHO, 2016), has been proved effective in improving maternal health knowledge (Ensor et al., 2014). These strategies allow health promotion, uptake of pregnancy related information, consultation where advice is required, as women may not be able to make for regular visits. This in turn might help pastoralist women to meet their pregnancy care need.

4.1 Limitations

The study involved one specific ethnic group with specific cultural practices and ways of living and may not reflect all pastoralist settings. Interviewing other communities (pastoralist) ANC experience may have provided a broader understanding of the topic and comparison of their experiences. Triangulation of multiple data collection techniques and a range of perspectives from several stakeholders from five different villages and five dispensaries.

5.0 Conclusion:

This is the first study to explore the factors affecting ANC experiences among a pastoralist community in Kenya. The key findings on the need for the handbook, the challenges of pastoralist way of life and contextual barriers contributed to the partial use of ANC services by the pastoralist community. This partial use of ANC suggests urgent need for better and more comprehensive context specific strategies, if pastoralist women were to appreciate and adhere to WHO recommendations of eight ANC contacts.

The possible recommendations included a ‘one-stop-shop’ approach where comprehensive ANC services, as women strive to make an initial visit. This then should be supported by other approaches including mobile phone follow-up, outreach mobile services, and task shifting. This might enable pastoralist women to meet their

ANC needs and achieve the eight ANC contacts as recommended by WHO (WHO, 2016).

The facilitators identified in this study are timely and important insight to the developing countries, particularly Kenya as the country is transitioning from current WHO four ANC visits into eight ANC contacts, and particularly for pastoralist population. Further research is needed (among others) to; (i) explore use of mobile phone and mass media as potential strategies to link the community with healthcare services., (ii) strategies for providing education, services and promoting uptake of ANC (iii) explore how TBAs roles can be reinforced to bridge the knowledge gap in the community to influence ANC attendance.

Reference

ACHOKI, T., MILLER-PETRIE, M. K., GLENN, S. D., KALRA, N. 2019. Health disparities across the counties of Kenya and implications for policy makers, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet Global Health,* 7**,** e81-e95.

AG AHMED, M. A., HAMELIN-BRABANT, L. & GAGNON, M. P. 2018. Sociocultural determinants of nomadic women's utilization of assisted childbirth in Gossi, Mali: a qualitative study. *BMC Pregnancy Childbirth,* 18**,** 388.

AL-ZAHRANI, A. 2010. *Women's sexual health care in Saudi Arabia: A focused ethnographic study.* Doctor of Philosophy, University of Sheffield.

ANNEY, N. V. 2014. Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)* 5(2): 272-281.

ASSEFA, L., ALEMAYEHU, M. & DEBIE, A. 2018. Magnitude of institutional delivery service utilization and associated factors among women in pastoral community of Awash Fentale district Afar Regional State, Ethiopia. *BMC Res Notes,* 11**,** 162.

BARREIX, M., THERESA A. LAWRIE. T.A., KIDULA, N., TALL, F., BUCAGU, M., CHAHA, R., & TUNÇALP.O. 2020. Development of the WHO Antenatal Care

Recommendations Adaptation Toolkit: a standardised approach for countries. *Health Research Policy and Systems,18:70.*

BERG, B. L. 2007. *Qualitative research methods for the social sciences.* , London: Pearson.

BOADU, N. Y. & HIGGINBOTTOM, G. 2014. Using Malaria Rapid Diagnostic Tests in Ghana: A Focused Ethnography. *In:* DE CHESNAY, M. (ed.) *Nursing Research Using Ethnography.* Springer Publishing Company.

CAPRARA & LANDIM 2008. Ethnography use, potential and limits in health research. *Interface,* vol.4 no.se Botucatu.

CHORONGO, D., OKINDA, F. M., KARIUKI, E. J., MULEWA, E., IBINDA, F., MUHULA, S., KIMATHI, G. & MUGA, R. 2016. Factors influencing the utilization of focused antenatal care services in Malindi and Magarini sub-counties of Kilifi county, Kenya. *Pan Afr Med J,* 25**,** 14.

COOK, K. E. 2005. Using critical ethnography to explore issues in health promotion. *Qual Health Res,* 15**,** 129-38.

CRUZ, E. & HIGGINBOTTOM, G. 2013. The use of focused ethnography in nursing research. *Nurse Researcher.,* 20, 4, 36-43.

DO, M., WANG, W., HEMBLING, J. & AMETEPI, P. 2017. Quality of antenatal care and client satisfaction in Kenya and Namibia. *Int J Qual Health Care,* 29**,** 183-193.

EKABUA, J., EKABUA, K. & NJOKU, C. 2011. Proposed framework for making focused antenatal care services accessible: a review of the nigerian setting. *ISRN Obstet Gynecol,* 2011**,** 253964.

EL SHIEKH, B. & VAN DER KWAAK, A. 2015. Factors influencing the utilization of maternal health care services by nomads in Sudan. *Pastoralism,* 5.

ENEYEW, A. & MENGISTU, S. 2013. Double Marginalized Livelihoods: Invisible Gender Inequality in Pastoral Societies. *Societies,* 3**,** 104-116.

FETTERMAN, D. M. 2010. *Ethnography: Step by step (3rd ed).* , Thousand Oaks, CA: Sage Publications.

FLETCHER, A. J. 2017. Applying critical realism in qualitative research: methodology meets method. *International Journal of Social Research Methodology,* 20**,** 181-194.

GILL, P., STEWART, K., TREASURE, E. & CHADWICK, B. 2008. Methods of data collection in qualitative research: interviews and focus groups. *Br Dent J,* 204**,** 291-5.

GITIMU, A. H., C.ORUKO, H.KARIJO, E.GICHUKI, R.OFWARE, P.LAKATI, A.NYAGERO, J. 2015. Determinants of use of skilled birth attendant at delivery in Makueni, Kenya: a cross sectional study. *BMC Pregnancy Childbirth,* 15**,** 9.

GOODSON, L. & VASSAR, M. 2011. An overview of ethnography in healthcare and medical education research. *J Educ Eval Health Prof,* 8**,** 4.

GRANEHEIM, U. H. & LUNDMAN, B. 2004. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today,* 24**,** 105-12.

GUNAWAN, J. 2015. Ensuring trustworthiness in qualitative research. *Belitung Nursing Journal,* 1(1):10-11.

HIGGINBOTTOM, G., M. A. , PILLAY, J., J & BOADU, N., Y. 2013 Guidance on Performing Focused Ethnographies with an Emphasis on Healthcare Research. *The Qualitative Report* Volume 18, Article 17, 1-16.

HIGGINBOTTOM, G. M. A. 2004. Sampling Issues in Qualitative Research. http://dx.doi.org/10.7748/nr2004.07.12.1.7.c5927. *Nurse Researcher* 12, 7-19.

HUKA, H. D., INGRID M. MUR-VEEMAN & ARNO VAN RAAK 2001. Pastoralist health care in Kenya. *International Journal of Integrated Care* *http://www.ijic.org/* Vol. 1,(1) 1568-4156.

JACOBS, C., MICHELO, C. & MOSHABELA, M. 2018. Why do rural women in the most remote and poorest areas of Zambia predominantly attend only one antenatal care visit with a skilled provider? A qualitative inquiry. *BMC Health Serv Res,* 18**,** 409.

JANICE, J. & SMITH, J. 2017. Ethnography: challenges and opportunities. *Evid Based Nurs* 20 ,4

JENET, A., N. , BUONO, S., DI LELLO, M., GOMARASCA, C., HEINE, S., MASON, M., NORI, R., SAAVEDRA, K. & TROOS., V. 2016. The path to greener pastures: pastoralism, the backbone of the world's drylands. *Vétérinaires Sans Frontières International (VSF-International). Brussels, Belgium.*

KAINGU, C. K., ODUMA, J. A. & KANUI, T. I. 2011. Practices of traditional birth attendants in Machakos District, kenya. *J Ethnopharmacol,* 137**,** 495-502.

KDHS 2014. Kenya Health Demographic Survey. Kenya.

KIRUPI, N. & RIDGEWELL, A. 2008. A Double Bind: The Exclusion of Pastoralist Women in the East and Horn of Africa. Minority Rights Group International.

KRUEGER, R. & CASEY, M. 2000. Focus Groups: A Practical Guide for Applied Research, 3rd ed. . Thousand Oaks, CA: Sage Publications.

LACONO, J., BROWN, A. & HOLTHAM, C. 2009. Research Methods – a Case Example of Participant Observation,. *Electronic Journal of Business Research Methods* 7 Issue 1, (pp.39 - 46),.

LUND, S., HEMED, M., NIELSEN, B. B., SAID, A. S., K., MAKUNGU, M. H. & RASCH, V. 2012. Mobile phones as a health communication tool to improve skilled attendance at delivery in Zanzibar: a cluster-randomised controlled trial. *BJOG,* 119**,** 1256-64.

MAGUIRE, M. & DELAHUNT, B. 2017. Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. *Journal of Teaching and Learning in Higher Education*.

MASON, L., DELLICOUR, S., TER KUILE, F., OUMA, P., PHILLIPS-HOWARD, P., WERE, F., LASERSON, K. & DESAI, M. 2015. Barriers and facilitators to antenatal and delivery care in western Kenya: a qualitative study. *BMC Pregnancy Childbirth,* 15**,** 26.

MINISTRY OF HEALTH KENYA 2017. Kenya Task Sharing Policy guidelines. *In:* KENYA., M. O. H. (ed.). Nairobi.

MOLLER, A.-B., PETZOLD, M., CHOU, D. & SAY, L. 2017. Early antenatal care visit: a systematic analysis of regional and global levels and trends of coverage from 1990 to 2013. *The Lancet Global Health,* 5**,** e977-e983.

MORSE, J. M. 2010. How different is qualitative health research from qualitative research? Do we have a subdiscipline? . *Qualitative Health Research, ,* 20, 1459–1468. doi:10.1177/1049732310379116.

MUGO, N. S., DIBLEY, M. J. & AGHO, K. E. 2015. Prevalence and risk factors for non-use of antenatal care visits: analysis of the 2010 South Sudan household survey. *BMC Pregnancy Childbirth,* 15**,** 68.

NEKE, N. M., GADAU, G. & WASEM, J. 2018. Policy makers' perspective on the provision of maternal health services via mobile health clinics in Tanzania-Findings from key informant interviews. *PLoS One,* 13**,** e0203588.

NICHOLLS 2009a. *Qualitative Designs and Methods in Nursing (Set)*.

NJUGUNA, J., KAMAU, N. & MURUKA, C. 2017. Impact of free delivery policy on utilization of maternal health services in county referral hospitals in Kenya. *BMC Health Serv Res,* 17**,** 429.

NYUMBA, O. T., WILSON, K., DERRICK, C. J., MUKHERJEE, N. & GENELETTI, D. 2018. The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution,* 9**,** 20-32.

O'BYRNE, P. 2012. Population health and social governance: analyzing the mainstream incorporation of ethnography. *Qual Health Res,* 22**,** 859-67.

OGUNDAIRO, J. A. & JEGEDE, A. S. 2016. Socio-Cultural Challenges in Accessing Antenatal Care by Pregnant Fulani Women in Ibarapa Central Local Government, Oyo-State, Nigeria. *Ann Public Health Res* 3(3): 1043.

OWUSU-ADDO, S. B., OWUSU-ADDO, E. & MORHE, E. S. 2016. Health information-seeking behaviours among pregnant teenagers in Ejisu-Juaben Municipality, Ghana. *Midwifery,* 41**,** 110-117.

POPE, C., ZIEBLAND, S. & MAYS, N. 2000. Qualitative research in health care. Analysing qualitative data. . *British Medical Journal, ,* 320, 114-116.

PYONE, T., ADAJI, S., MADAJ, B., WOLDETSADIK, T. & VAN DEN BROEK, N. 2014. Changing the role of the traditional birth attendant in Somaliland. *Int J Gynaecol Obstet,* 127**,** 41-6.

RABIEE, F. 2004. Focus-group interview and data analysis. *Proceedings of the Nutrition Society,* 63**,** 655-660.

RASHID, M., CAINE, V. & H., G. 2015. The Encounters and Challenges of Ethnography as a Methodology in Health Research. *International Journal of Qualitative Methods,* 1–16.

REEVE, M., ONYO, P., NYAGERO, J., MORGAN, A., NDUBA, J. & KERMODE, M. 2016. Knowledge, attitudes and practices of traditional birth attendants in pastoralist communities of Laikipia and Samburu counties, Kenya: a cross-sectional survey. *Pan Afr Med J,* 25**,** 13.

REGMI, K., NAIDOO. J. & P., P. 2010. Understanding the Processes of Translation and Transliteration in Qualitative Research. *International Journal of Qualitative Methods* 9(1).

RICHARDS, L. & MORSE, J. 2007. *Readme First for a User's Guide to Qualitative Methods,* Sage Publications, Thousand Oaks CA.

RITCHIE, J. & LEWIS, J. 2003. *QUALITATIVE RESEARCH PRACTICE A Guide for Social Science Students and Researchers,* SAGE Publications.

ROPER, J. M. & SHAPIRA, J. 2000. *Ethnography in nursing research.* , Thousand Oaks, CA: Sage Publications.

SARAVANAN, S., TURRELL, G., JOHNSON, H., FRASER, J. & PATTERSON, C. 2011. Traditional birth attendant training and local birthing practices in India. *Eval Program Plann,* 34**,** 254-65.

SARMENTO, R., . 2014. Traditional Birth Attendance (TBA) in a health system: what are the roles, benefits and challenges: A case study of incorporated TBA in Timor-Leste. *Asia Pacific Family Medicine* 13:12.

SAVAGE, J. 2000. Ethnography and health care. *BMJ* Vol 321.

TEKLESILASIE, W. & DERESSA, W. 2018. Husbands' involvement in antenatal care and its association with women's utilization of skilled birth attendants in Sidama zone, Ethiopia: a prospective cohort study. *BMC Pregnancy Childbirth,* 18**,** 315.

UNFPA 2014. United Nations Population Fund report August : Counties with the Highest Burden of Maternal Mortality; http://kenya.unfpa.org/news/counties-highest-burden-maternal-mortality. .

VAN NES, F., ABMA, T., JONSSON, H. & DEEG, D. 2010. Language differences in qualitative research: is meaning lost in translation? *Eur J Ageing,* 7**,** 313-316.

WAKO, W. G. & KASSA, D. H. 2017. Institutional delivery service utilization and associated factors among women of reproductive age in the mobile pastoral community of the Liban District in Guji Zone, Oromia, Southern Ethiopia: a cross sectional study. *BMC Pregnancy Childbirth,* 17**,** 144.

WHO. 2006. *ReproductiveHealth Indicators: Reproductive Health and Research Guidelines for their generation, interpretation and analysis for global monitoring* [Online].Available: http://www.who.int/reproductivehealth/publications/monitoring/924156315x/en/ [Accessed 17.05.17].

WHO 2015a. Global standards for quality health-care services for adolescents; a guide to implement a standards-driven approach to improve the quality of health-care services for adolescents.

WHO. 2015b. *Health promotion intervention for maternal and neonatal* [Online]. Available: http://apps.who.int/iris/handle/10665/172427 [Accessed 13.05.17].

WHO. 2016. *WHO recommendations on antenatal care for a positive pregnancy experience*[Online].Available: http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/anc-positive-pregnancy-experience/en/ [Accessed 06.06.2017].

WILUNDA, C., SCANAGATTA, C., PUTOTO, G., MONTALBETTI, F., SEGAFREDO, G., TAKAHASHI, R., MIZERERO, S. A. & BETRAN, A. P. 2017. Barriers to utilisation of antenatal care services in South Sudan: a qualitative study in Rumbek North County. *Reprod Health,* 14**,** 65.

ZAMAWE, F. C. 2015. The Implication of Using NVivo Software in Qualitative Data Analysis: Evidence-Based Reflections. *Malawi Medical Journal,* 27.

ZHAO, M. & JI, Y. 2014. Challenges of introducing participant observation to community health research. *ISRN Nurs,* 2014**,** 802490.