

Determinants of First Antenatal Care Visit among Pregnant Women Attending Tenwek Hospital, Bomet County, Kenya

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ABSTRACT

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

Key words: First Antenatal Care Visit, Antenatal Care Visit, Timing

I. INTRODUCTION

Attendance of Antenatal Clinic is important for every expectant woman. It helps identify possible risks during pregnancy. Thus, these risk issues can be identified early and solved early. Therefore, every expectant mother needs to plan for their antenatal clinic visits and ensure that they attend these sessions at respective hospitals. However, there are various reasons which may inhibit effective attendance of the Antenatal clinics. Some of the reasons which may inhibit effective presentation of pregnant women for their ANC visit may include cultural, individual and even hospital factors. However, this research specifically delves into the specific reasons which determine the presentation of pregnant mothers for their first ANC visit in Tenwek Hospital, Bomet County. Notable conditions such as hypertension and antepartum hemorrhage, are the key causes of maternal death. Such conditions can be prevented through timely antenatal services (Say et al 2014). Generally, conditions such as malaria, HIV/AIDS, anemia and malnutrition tend to worsen during pregnancy causing considerable maternal and neonatal morbidity and mortality. Violence against woman and workplace hazards exposure than to be detrimental to pregnant women and their unborn causing morbidities and mortalities thereof (Lincetto et al, 2006).

Antepartum stillbirths have several causes, comprising of TORCHES (commonly syphilis) and other childbirth complications. The unborn fetus is at risk of preterm delivery, intrauterine growth restriction (in case of multiple gestations), congenital abnormalities and fetal alcohol syndrome (selected alcoholic mothers) (Lincetto et al., 2006). There is still a significant number of neonatal complications in Bomet County and at Tenwek hospital but the reasons for these complications are not clear. Most of the mothers who have experienced these problems did not start ANC as per the WHO recommended time. Delay in diagnosis and management of these conditions affect maternal morbidity and fetal outcomes as seen in a research done in Bomet County Longisa County hospital (Odwoyo et al, 2017). Therefore, this study seeks to determine the maternal individual reasons that contribute to delays in presentation for the first ANC visit.

II. STATEMENT OF THE PROBLEM

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

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

Research objective

The main objective of this study was to explore maternal individual reasons that determines the timing of the first antenatal visit.

III. LITERATURE REVIEW

According to the Lancet Global Health (2013), it was estimated that the global coverage of ANC visit was 58.6% with varying percentages in individual regions. Lancet Global Health (2016) reported that where women receive care that is not timely or sufficient or no care at all results in poor maternal health resulting in mortality and severe morbidity. Although there was a substantial decline ratio reported by WHO 2013, millennium development goal 5 was not achieved. This millennium development goal 5 aimed at lowering the death rate of pregnant and postnatal mothers by 75% by 2015. Worldwide, maternal sicknesses and death pose a major health challenge especially in countries where resources are limited. Inadequacy of antenatal care received by pregnant women due to either untimed services or complete absence yielded 303,000 maternal mortalities as per WHO 2015. Low resource countries experienced ninety-nine per cent of maternal mortality ratios which was also reported by WHO 2015. WHO recorded a less than one per cent decline in low and middle-income countries. This could be attributed to poor timing and underutilization of ANC. Despite the good advancement report on ANC coverage by Moller et al, the limit required and recommendation by WHO on early ANC schedule has not been attained (Moller, et al 2017).

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

IV. METHODOLOGY

A qualitative phenomenological study was carried out among pregnant women presenting for Antenatal Care at Tenwek Hospital. Antenatal women seeking ANC care in Tenwek Hospital for the first time who had not attended elsewhere for the care during the current pregnancy were sampled. Homogenous purposive sampling method was used. The study participants were sampled using a consecutive sampling method. Data were collected until saturation was achieved targeting a sample size of 12 to 20 participants this is according to a meta-analysis (Vasileiou et al., 2018). In this study saturation was reached at participant 13 but we interviewed 16 participants.

Once the permit from NACOSTI and got clearance from Kabarak University (IREC), the researchers liaised with the Maternal Child Health clinicians and nurses and familiarize them regarding the criteria of the study inclusion/exclusion requirements for the respondents. If a client met the criteria and agreed to consent, the interview was set up in one of the quiet rooms in the MCH and the trained research assistants were allowed to administer the interview guide.

Inclusion and exclusion criteria

This included all pregnant mothers who were presenting for the first ANC visit. All mothers who were willing to take part in the study and were presenting for the first time in antenatal care. All pregnant mothers coming for the first ANC visit. All pregnant mothers who were not conversant with English, Swahili or Kipsigis were excluded from the study. Pregnant mothers who were presenting for the first time and were critically ill were also excluded from the study. Besides, pregnant mothers who were in labor were excluded from the study.

Sampling procedure and sample size

Nurses working in the MCH department were asked to identify mothers who were presenting for the first time for antenatal care. The MCH health worker informed the identified mothers of about the study and referred them to the principal investigator. The principal investigator explained in detail about the study to the mother. The mother was asked to consent, and if she consented, further details about the interview were availed to her and research assistant allowed to interview on the same day at the exit. The selection of participants was done aiming at taking part in interview until the desired sample size was achieved

Data collection procedure

Research Authorization and the permit was obtained from the National Council of Science and Technology (NACOSTI). Additional ethical approval for the research was sought from the ethical review committees at Kabarak University and Tenwek Hospital.

After the study was approved, two female nurses' research assistants were trained by the principal investigator on how to carry out the interview. The process of the operating tape recorder was demonstrated. The appropriate way of asking questions was pre-tested. In-depth interviewer guide questioner was used to collect data (appendix II). The consented participants were subjected to the interviewer guide questioner by the research team; their responses were recorded using an audio recorder. Interviews were held during working hours in a conducive environment (in one of the offices in the MCH department where it has been known to provide adequate privacy as it has been used for confidential counselling). The interview took approximately 45 minutes for each respondent

Data analysis

Data analysis was performed using open coding method. This was initially done by two people, the principal investigator being one of them. This was according to a coding process suggested by Johnny Saldana (2009). The audio-taped information was transcribed verbatim and then the information in Kiswahili and Kipsigis was then translated to English. A second transcriber was involved to ensure that correct translations had been made by the first transcriber. Two researchers (first and second transcriber) looked at the transcribed data independently and analyzed it independently. This was done by reading and re-reading then codes were generated. The codes were then arranged in categories with similar subthemes which then generated the emerging themes. After this process was done, the two researchers came together to compare if the themes were similar then they merged the recurring themes. The recurring themes then were assigned meanings depending on the theory that was brought up as to why women presented for their first ANC. This was to ensure trust worthiness of the final results. After this process was complete, the principal investigator wrote the final report on the findings.

V. RESULTS AND DISCUSSION

A total of 16 participants who were above the age of 18 years were involved in the study. Some of the documented individual reasons for the delayed presentation of the first ANC visit were: lack of knowledge on when to make the first ANC visit, fear of people knowing that they are pregnant, lack of support from their spouse and economic reasons, absence of feelings of sickness during the pregnancy period.

Maternal individual reasons that determine the timing of the first antenatal visit

A. Economic reasons

According to this study, it was evident that women delayed in presenting to the clinic for their first time at ANC because of financial reasons. Financial reasons not only made them lack fare to travel the long distances to the hospital for ANC but also to access and pay for ANC services at the hospitals. Further, the financial reasons also made some of them unable to pay for their NHIF subscription. Additionally, if there was any prescribed medication then most women would probably not afford to purchase the medication. In a study by Manyeh et al. (2020) in rural southern Ghana infers that most of these women could not afford to pay for the ANC services. Another study by Njiga et al. (2019) found out that the lack of transport and extra cash for emergency made most ladies delay attending ANC. From this study, several of the research participants did not have an NHIF card. This therefore shows that lack of finances greatly affects the timing of first ANC visit hence affecting care negatively. Despite the government offering free maternal and child services, ANC is not covered under the LINDA MAMA initiative.

B. Fear

Fear is defined as potent natural human emotion triggered by threatening events. In this study, it was noted that fear of being tested for HIV and STIS made some of these women come late for the first ANC care. Other women feared being stigmatized because of either being single mothers or underage mothers. Others were afraid because of information they had received from multi-gravida mothers. Fear in this study also manifested itself when pregnant mothers feared getting infected by the existing COVID-19 infection. Njiga et al. (2019) attested that fear in expectant mothers affected their presentation to ANC as a result of various aspects which may defer from one individual to another. These factors are very comparable to what was found in this study. In this particular study, it is evident that fear affected the presentation of several patients to the ANC. Six patients in this study were affected by the fear associated with various aspects.

These six participants alluded that the new mothers generally feared being stigmatized and the discovery of their HIV status as well as the presence of STI infections. This study is in line with a study done in Gambia where a large proportion of women in were not using antenatal care because of fear of HIV tests during pregnancy hence impacted the timing of ANC visit negatively and even the health of both mother and the baby (Yaya et al, 2020). Infectious pandemics have changed the psyche of humanity. Pandemics propagate fear and change the health seeking behaviour of individual. The presence of Covid 19 in our environs and beyond has made most of the respondents to mistime first ANC services. It took time for the respondents to get acquainted with the pandemic hence coming late to clinic after reassuring interventions like putting on a mask to guard once against contracting the Covid 19 (Hossain et al, 2020).

C. Misconceptions about ANC

The US Department of Health and Human Sciences (2010) describes human health literacy as the degree of which humans are capable of obtaining, process and understand basic health information available to them and make appropriate decisions. It is therefore evident that persons with limited literacy may often misunderstand information and therefore misinterpret the same information to suit their interests. A study done by Njiga et al. (2019) revealed that multi-gravida mothers purposefully delayed ANC for themselves because they often believed that they had more experience in handling their pregnancy. This infers that those who did not present for ANC on time did not understand the benefits of ANC to their pregnancy. It is evident in this study that some mothers only presented for ANC when they fell ill or had experienced some pain or even a fall. Some expectant women never presented for ANC if they felt generally well during the pregnancy. Thus, it is evident from the results and in comparison, to the cited studies that misconceptions about ANC affected mothers' presentation for ANC at Tenwek Hospital. Hence, majority would present late for their first ANC.

Hospital factors affecting first ANC visit

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

Cultural factors affecting presentation for first ANC care

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

In this study, it is evident that cultural beliefs influenced some participant's presentation to the first ANC care. The cultural practices misled patients from fully embracing the importance of attending ANC. In this study, negative influences from other multiparous women on benefits of ANC affected timing of ANC attendance. Some of these negative cultural influences were like; some women delivered just fine without ANC care, hospital medication was bad for their pregnancy hence herbs were better, the fact that every time one goes for ANC in hospital, they would get a vaginal exam which was not good for the pregnancy and belief that generally ANC

was not necessary. Despite a study done in Kenya by Njiga et al (2019) that found that most women who presented for ANC knew the benefits of ANC and therefore were eager to gain from the ANC clinics, this tends to differ from this study since the ideologies depicted by some of the respondents tend to allude that much needs to be done in terms of educating women in this community about the importance of ANC. Besides, the studies revealed that some mothers purposefully avoided ANC care because they relied on traditional herbalists for medical advice.

Recommendations

- i. Pregnant mothers should have their own registration office and should be attended to separately from the rest of the patients to reduce queues and delays in attendance
- ii. NHIF approvals for diagnostic and treatments for pregnant mothers should be easier than the current process. Provisions should be made to make drugs more accessible and highly subsidized.
- iii. A study on the impact of the free maternal and child services (LINDA MAMA) on attendance of ANC

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