

Original Article

Factors associated with delayed Antenatal Care attendance in Malawi: Results from a Qualitative study

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ABSTRACT

Background: Antenatal care has been identified as pivotal to improving maternal and child health in Malawi. Though Malawian women consistently seek antenatal care, they rarely do so during their first trimester. The purpose of this study was to identify barriers to antenatal care uptake among Malawian women. This article adds to the literature by identifying common sociocultural barriers and their impact on ANC attendance.

Methods: Two large tertiary care hospitals in the central and southern regions of Malawi were selected as study sites. Twenty pregnant mothers and eight health workers were recruited and interviewed. The interviews were transcribed verbatim and analyzed to identify themes. Posters in health facilities were also analyzed.

Results: Results revealed many contributors to delayed antenatal attendance among Malawian mothers including: attitudes toward pregnancy, hospital inefficiencies, ANC promotion at the health facilities/communities, and spousal/significant other involvement all contributed to delayed antenatal attendance among urban Malawian women.

Conclusions: Incorporating spouses/significant others in

antenatal care activities, providing a consistent message in promotion materials used with the women and addressing the inefficiencies within the health system could be targets to improve early antenatal attendance in Malawi.

INTRODUCTION

Malaria, HIV, nutritional shortages, and limited access to quality reproductive health services underpin Malawi's high maternal mortality rates of 574 per 100,000 live births compared with 8 per 100,000 in industrialized countries.¹ As in most countries in sub-Saharan Africa, high maternal mortality, low child survival, and mother-to-child HIV transmission are challenges in Malawi. Consequently, Malawi has adopted the Antenatal care (ANC) model of four visits recommended by the World Health Organization (WHO) for mothers with low-risk pregnancies.

The 2016 WHO ANC model recommends a minimum of eight ANC contacts. The 2016 WHO ANC model – which replaces the previous four-visit focused ANC (FANC) model recommends that the first contact scheduled to take place in the first trimester (up to 12 weeks of gestation), two contacts scheduled in the second trimester (at 20 and 26 weeks of gestation) and five contacts scheduled in the third trimester (at 30, 34, 36, 38 and 40 weeks).² Malawi is yet to adopt these recommendations and currently, the visits as practiced is as follows: the first visit is

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recommended within the first 16 weeks of pregnancy, the second between 24 and 28 weeks, the third at 32 weeks, and the fourth at 36 weeks.³ To assess women's attendance at ANC clinics and the services received, Malawi uses a health passport similar to immunization cards in Western countries. This passport keeps a record of all health services a woman has received; some health care facilities use it as a prerequisite for birth delivery.

Factors associated with delayed ANC attendance vary by country, region, culture, and population. The most common barriers worldwide are transportation, the cost of services, and parity (number of births per mother). In a systematic review of ANC in developing countries, researchers found three main barriers to care, namely: (a) maternal/spouse education, (b) cost of services, and (c) access to care.⁴ The authors also noted that religious and cultural beliefs were prominent barriers. Other researchers found perceptions of care to be a barrier; some women believed that ANC was reserved for those who were having health problems or complicated pregnancies, not for prevention and general well-being.⁵ Pell *et al* identified the following common barriers from a multi-country comparison study of Ghana, Kenya, and Malawi: (a) lack of interaction with health workers, (b) the age of the woman (adolescents, unmarried young women and older women), and (c) limited staff knowledge of diagnosing pregnancy during early months across all three countries.⁶ In a recent Malawian study, researchers identified culture and the patient-provider relationship as major contributors to delayed ANC attendance.^{7,8}

Despite this knowledge, the underlying causes of these barriers to ANC attendance and how best to overcome them are unclear. Understanding these issues is vital to improving ANC use and thus reducing infant mortality and improving maternal health. The purpose of this study was to identify barriers to antenatal care uptake among Malawian women.

METHODS

We collected qualitative data from 20 mothers and eight health professionals, using an adapted demographic health survey from two large tertiary care hospitals in the central and southern regions of Malawi namely Kamuzu Central Hospital (KCH) and Queen Elizabeth Central

Hospital (QECH). An interviewer-administered semi-structured interview guide assessed barriers to care. In addition to interviews, we observed clinic practices and reviewed hospital and patient records. We further assessed community services and resources through a windshield survey. Participants were selected through purposive sampling methods and snowball sampling techniques.

We initially set out to interview pregnant and postpartum mothers; unfortunately, we were unable to recruit postpartum mothers. Data were analyzed using thematic content analysis methods, through the development of codes and themes, to determine significant factors that contributed to delayed antenatal attendance. Data were triangulated across methodologies for accuracy of responses and validity.

RESULTS

Results from the study revealed many contributors associated with delayed antenatal attendance among urban Malawian mothers including: attitudes toward pregnancy, marital status, hospital inefficiencies, lack of spousal support and conflicting ANC promotion messages.

The results of the demographic survey we conducted showed that mothers, in this study, presented for antenatal care during their second trimester or later (see table 1 & 2 for detailed demographic data). This trend was also observed in the Malawi Demographic Health Survey (MDHS) conducted in 2010.³ In addition, most mothers in our study were older (>30), had secondary education or higher and had been pregnant multiple times. Interestingly, when mothers were asked about the number of children they had, that number did not match the number of pregnancies reported, which indicates that child survival was a prominent issue among our study population. Whereas, the health workers in our study were older than the mothers (>35) and were more advanced in their schooling, unfortunately, half of the health workers who participated were early career professionals, working five years or less in the field.

Table 1: Pregnant Women Demographic Characteristics

Participants (N-20)	N	% of total
Pregnant Mother		
Age		
<19	1	5
20.29	8	40
30.39	10	50
40	1	5
Education		
Primary	3	15
Secondary	9	45
Certificate/Diploma/Advanced Diploma	4	20
College/University	4	20
Parity		
Primagravida	4	20
Multigravida	16	80
Pregnancy		
Planned	18	90
Unplanned	2	10
ANC Presentation		
1 st Trimester	5	25
2 nd Trimester	15	75

Table 2: Health Workers Demographic Characteristics

Participants (N-8)	N	% of total
Age		
25-34	2	25
35-39	2	25
40-44	3	38
45+	1	13
Education		
Certificate/Diploma/Advanced Diploma	3	38
College/University	5	63
Occupation		
Nurse Midwife Technician/Midwife	4	50
Clinical Officer	1	13
Physician	3	38
ANC Experience		
0-5 years	4	50
6-10 years	2	25
11-15 years	2	25

Attitudes toward pregnancy

Two women in our study reported wanting to abort their pregnancies, as the pregnancy was unplanned. One mother was young (18 years) and had been pregnant before but miscarried. She delayed presenting for ANC because she hoped she would also miscarry this baby and would not have to deal with the social ramifications of being young, unmarried, and pregnant.

“...because I have miscarried before so I was waiting for what I thought was the inevitable...”

~Pregnant Mother#9

Religion and Ethnicity

All participants (mothers and providers) self-identified as Christian for their religious group. Roman Catholic was the largest represented religious affiliation for maternal interviewees (30%) followed by Church of Central Africa Presbyterian (CCAP) and Pentecostal (20%). Health workers top religious affiliations were: CCAP (38%), Anglican (25%), and Roman Catholic (13%). These religious groups were also prominent in the 2010 MDHS with 21% Catholics, 17% CCAP, and 40% other Christian.

Religious beliefs influenced a mother's decision to seek antenatal care; mothers noted that some religious groups encouraged their parishioners to seek care from the pastoral staff instead of going to the hospital. Women were not always sure which churches promoted this message but some believed the Apostolic and Church of Christ churches participated in this practice.

“Some mothers don't come for ANC because of the beliefs from their churches, because some churches they will tell them that they should not go to the hospital. So they don't go for ANC, they just stay at home until they deliver...”

~Pregnant Mother #1

Marital Status

Demographic results from the survey indicated that all maternal interviewees were either married or living together with the unborn child's father. However, the interview results revealed that all mothers were not married or living together. Thus, it appeared to be the socially appropriate answer to give especially, if women were pregnant outside of wedlock or with someone other than a spouse. This, too, influenced the mother's decision to seek care if she was ashamed of her pregnancy or current relationship status, she did not want to be seen going to the clinic where others could see her or learn about her relationship history.

Hospital Inefficiencies

In order to recruit postpartum mothers we reviewed the hospital's labor records to identify potential mothers; however, as we observed the labor records, we noticed that patients were recorded differently throughout the various areas of the hospital. For example, in the ANC clinics, women were assigned a patient number along with basic demographic details; patients in the ANC wards also were assigned patient numbers, but these numbers did not correspond with those used in the clinic. Therefore, if a woman attended the ANC clinic and was transferred to the ANC ward for further treatment or testing she received a new patient record and identification number. The same was true in the labor and postnatal wards. Due to the inconsistent patient identifiers used at the various points of services throughout the hospital, it was difficult to track patients throughout the hospital and to identify postpartum mothers who did not receive ANC at the hospital or received no ANC but delivered at the hospital. When we were successful in identifying postpartum women, they did not meet the eligibility criteria or refused to participate in the study.

ANC clinic operations and practices observed did not correlate with descriptions of services providers stated in the interviews. Each provider mentioned that health education was the primary activity provided at the clinic before women received other services such as checking of vital signs, meeting with providers and receiving HIV testing and counseling. Our observations showed that health education was a group activity but not always the first activity; sometimes women received ANC without any health education if they arrived early in the day. In addition, HIV testing was not always offered if the designated counseling and testing room was being used for another service.

Moreover, when asked about the frequency of health education topics provided at the clinic, there were no consistent responses. Providers noted that topics changed frequently but there was no system in place to track what topics were provided over a nine-month period. We also observed that mothers attended the clinics at various gestational ages each requiring varying degrees of pregnancy-related health education. Based on our

observations, it is possible for a woman to attend each required visit and hear the same topic at each visit.

"In the past, we used to have schedules for the topics but ah, this time we don't have schedules but we are planning to restart. Maybe during the week we have different topics because in a month we can have three topics of malaria, three topics of six food groups, three topics maybe of birth preparedness, dangerous signs..."

~Health Worker Site #1

"We used to give two, one topic for two weeks, so one topic for two weeks or we divide them maybe if they are asking more questions on that topic you can do it even it more even three times one topic."

~Health Worker Site #2

Furthermore, women who attended late received no health education at all, as they would have missed the group health education session held at the beginning. Women who missed health education did not gain the benefit of learning about the different stages of pregnancy, how to prepare for labor, or how to breastfeed, among other relevant topics. Since provider time is limited, the health education activity is used to inform mothers about their pregnancies, their development and answer any questions they may have in a group setting. Missing these activities decreases the amount of knowledge a mother has about her pregnancy and development stages of her child.

ANC Promotion

We also observed conflicting ANC promotion messages; hospitals had messages painted on walls promoting ANC utilization. However, these messages did not always match what providers said in health education sessions or practiced. For example, the Figure 1 below shows a picture of a pregnant woman, with her health passport in hand. The message reads, "It is something special to be pregnant. A mother should start antenatal care once she notices that she is pregnant before three months." However, we observed patients denied service because they did not have an appointment, even when they attended early or were classified "high risk" by their local health center. Therefore, these patients had to schedule an appointment and return to the clinic later to receive care.



Figure 1. Health Message Displayed at an Urban Hospital in Malawi. The message reads, “It is something special to be pregnant. A mother should start antenatal care once she notices that she is pregnant before three months.”

Other messages included encouraging women to attend ANC with their spouse, as noted in Figure 2. The message reads, “Go to the hospital during the first three months together with your husband.” In addition, though both figures stress the importance of attending ANC during the first three months of pregnancy, we observed most mothers did not present during this time and providers agreed that it was common for mothers to present after this time.



Figure 2. Health Message Displayed at an Urban Hospital in Malawi. The message reads, “Go to the hospital during the first three months together with your husband.”

Professional Development

Throughout the provider interviews, a theme arose regarding training and career development. Health workers stated that outside of their school training there was limited additional on the job training provided to them. At times, the Ministry of Health would offer nationwide training in cases of new national policies. Otherwise, providers relied on whatever additional training their place of employment offered. Midwives provide 95% of ANC to women during pregnancy, and physicians or clinical officers usually attend to pregnant women if a complication is detected during their ANC visit or if a complication arises at delivery. However, midwives noted that most educational opportunities were offered to physicians and clinical officers.

In-house training sessions on various reproductive health practices including preeclampsia, high-risk pregnancies and fertility were offered to health care providers at the study sites. However, my research team and I observed the lack of participation from midwives in the in-house training sessions that were often offered as they were busy operating the daily clinics. In fact, we did not observe midwives in any of the weekly or daily morning rounds held within the maternity wards (where antenatal care is offered).

DISCUSSION

Our findings reveal multiple factors associated with delayed ANC in Malawi and these include attitudes toward pregnancy, marital status, hospital inefficiencies, lack of spousal support and conflicting ANC promotion messages. While these issues are not unknown or new, our findings contribute to the discourse on studies that explore delayed antenatal attendance and utilization in the less developed regions of the world. Often cited reasons for the underutilization of antenatal care services include distance to the hospital or health care centers, transport, and money to pay for health services. Additionally, factors such as low maternal education, teen pregnancies, multi-parity, unplanned pregnancies, religion and cultural factors contribute to the low utilization of antenatal care services in low income settings like Malawi.⁴ Furthermore, women also face uncertainty and vulnerability in the first trimester.⁶ Our specific findings show that 15 of the 20 pregnant women we interviewed presented for their first antenatal care visit at the beginning of the second trimester. The national

survey reported less than 12% of mothers presented for ANC during their first trimester, whereas 25% of mothers in our study presented during the same time. However, this finding may be skewed by our sampling methods – recruiting from women at the ANC clinic. In addition, Malawi's national data reports that women typically presented for their first ANC appointment by their 16th week of pregnancy. This trend was confirmed in our study where most women presented during weeks 16-20 for their first ANC visit. Health workers also noted that this was a common trend observed at their facilities.

Feelings and attitudes towards one's pregnancy can influence whether or not a pregnant woman is eager to access antenatal care. While a small percentage of study participants fell into this category of unplanned pregnancies, research shows that delayed ANC attendance is associated with a desire for pregnancy. Women who had a favourable attitude toward their pregnancy were more likely to attend ANC, while women who had an unplanned or did not desire their pregnancies were less likely to attend ANC.^{9,10,11,12,13,14}

Studies from Uganda show that pregnant adolescents were more likely to experience violence from their parents, to be rejected by their partners, expelled from school, and to be stigmatized.^{15,16} The stigma and shame of an unwanted pregnancy influenced delaying antenatal care. Despite the small sample size, our study reveals that unplanned or unwanted pregnancies were one of the factors associated with delayed ANC attendance. This was especially apparent if the woman was young and unmarried. In addition, our study also shows that the marital status of a woman was a facilitator in supporting women to attend antenatal care services. In essence, marital status plays a vital role in facilitating the utilization of antenatal health care services.

Research has linked religious affiliation and ethnic groups to ANC attendance.¹⁷ Yoruba women in Nigeria were ten times more likely to attend ANC than Igbo and Hausa tribes.^{18,19,17} Women belonging to the Sukuma tribe attended ANC three weeks later than women belonging to Pogoro, Mhehe, and Mgindo.^{18,19,17} Of the women we interviewed, the Ngoni and Lomwe ethnic groups had the greatest representation among the maternal participants, whereas, health workers were mostly from the Chewa ethnic group. Comparatively, the Chewa ethnic group was the largest self-identified group represented in the 2010 MDHS followed by Lomwe and Ngoni groups.

Unfortunately, we did not explore whether religious or ethno-cultural beliefs are associated with ANC present an obstacle to early ANC initiation for the pregnant women we interviewed in this study. However, insight that traditional beliefs play a part in health seeking behavior and practices were gleaned from the data. For example, discussions on what types of foods to avoid as well as when to first present for antenatal care revealed health beliefs related to pregnancy and childbirth in Malawi. Other studies in South African and Zimbabwe suggest that culture and religion influence ANC attendance and that the practices attached to these beliefs tend to delay ANC initiation.^{20,21,22} report that women with high religiosity may feel less in need of assistance in pregnancy because they value and trust in their ethno-cultural and religious practices in ensuring a health pregnancy experience and outcome over presenting to a health facility to initiate antenatal care in the first trimester.²⁰

Furthermore, these beliefs remind us of is that belonging to a social or religious group does not exempt someone from holding traditional beliefs that influence their health seeking behavior practices. It is important, therefore to be aware that health beliefs related to pregnancy and childbirth exist in Malawi, which can result in complacency in health seeking practices. These health related beliefs may often be disguised as cultural beliefs and practices, however, they demand greater attention.⁷ Healthcare practitioners need to be aware of said beliefs and practices in order to develop the appropriate messaging tools that encourage positive beliefs and practices while discouraging those that are harmful and unnecessary.

Promoting ANC attendance within the first 12 weeks of gestation is essential as it paves the way for essential diagnosis and treatment of various complications a pregnant woman might have.²³ Our study sites displayed pictures with health messages; that promote initiating ANC visits early. Our findings show that inconsistent verbal messages often accompanied these pictures along with ambiguous practices by healthcare providers during health education talks. In cases where a woman is illiterate and cannot read or properly translate the message from the pictures, she has to rely on the information discussed or observed in the health education talks. Similar findings echo our study observations whereby health care staff did not advise women on when to initiate ANC during health talks. When such messages

were given, women were advised to initiate in their third month and only rarely did a staff member state that women should start as soon as they realize they are pregnant.⁶

Furthermore, messages that incentivize women attend ANC care with their husbands promote male involvement in maternal health and act as a form of encouragement to get pregnant women back because they are given priority in receiving services. Our findings show receiving ANC care before all other mothers' incentivized women who chose to attend with their spouse. While incentivizing women for spousal attendance was a common practice at the study sites, it was never discussed during the health talks and few women presented with their spouses. Healthcare providers have significant authority, especially in contexts where the population group they are dealing with has received very little or no formal education. As such, women tend to place trust in the instructions they give.⁶ Unfortunately, inconsistencies in messaging and practices do have a direct bearing on the early uptake of antenatal care services.

Hospital inefficiencies also compromise clinical operations and practices to the extent that women lack proper knowledge on correct and appropriate maternal care. Our observations reveal that the structure and flow of services offered to pregnant women attending antenatal care services at the study sites are not logical and capturing patient information is confusing. The disjointed approach to clinical operations and practice prohibit the development of a trusting and mutually respectful relationship between patient and healthcare provider thus hindering the smooth implementation of antenatal care services.⁸

Many of the factors discussed may be alleviated if midwives received regular training as part of their professional development. Midwives in our study report that they were left out of educational opportunities with preference given to clinical officers and physicians. Lack of vital professional development opportunities for these workers may contribute to the poor patient-provider relationship identified in other studies.⁸ Furthermore, the midwives in this study were relatively new professionals (<5 years' experience), and would probably benefit the most from professional development trainings since they see 95% of all pregnant women at the clinics. Offering midwives regular trainings and the opportunity to learn about the barriers to attendance and utilization of

antenatal care services will provide them with the ability to develop better strategies for improving their clinical practices and eventually translated into improved patient care.

STRENGTHS AND LIMITATIONS

The study was conducted in the maternity wards of at two large tertiary care hospitals in the central and southern regions of Malawi. As such, the research is particularistic and contextual and may not necessarily be representative of similar cases. In addition, the relatively small sample size means that the results are not generalizable to the wider population. However, where there are limitations, there are also strengths. This research enabled us to tackle “sensitive” topics and allowed us to appreciate the wider social context of people's experiences.

CONCLUSION

The paper has explored the sociocultural factors influencing attendance and utilization of ANC at two large tertiary care hospitals in the central and southern regions of Malawi. Incorporating spouses/significant others in antenatal care activities, providing a consistent message in promotion materials used with the women and addressing the inefficiencies within the health system could be targets to improve early antenatal attendance in Malawi. In particular, ensuring that nurse midwives are supported with regular training that is directed toward their continued professional development may help improve attendance and utilization of ANC services in Malawi.

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contextual insight into the study and analysis of findings, she also wrote the discussion section; D.S. wrote the abstract and extensively reviewed the paper.

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Abbreviations

The following abbreviations are used in this manuscript:

ANC: Antenatal Care

CCAP: Church of Central Africa Presbyterian

FANC: Focused Antenatal Care

MDHS: Malawi Demographic Health Survey

QECH: Queen Elizabeth Central Hospital

KCH: Kamuzu Central Hospital

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