Perceptions of pregnant women on reasons for late initiation of antenatal care: A qualitative interview study

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Abstract

Background: Antenatal care serves as a key entry point for a pregnant woman to receive a broad range of services and should be initiated at the onset of pregnancy. The aim of the study was to understand the reasons for late initiation of antenatal by pregnant women in Nkwen Baptist Health Center, Cameroon. Methods: The study applied purposive sampling to recruit eighteen pregnant women and three key informants for data collection through individual interviews. Pregnant women who initiated antenatal care after the first trimester were recruited during antenatal care clinics and interviewed in a room at the antenatal care unit. Key informants were midwives working at the antenatal care unit. Participation in the study was voluntary. Participants were explained the purpose of the study and signed a consent form if they were willing to participate in the research. Data was collected using an audio tape and analyzed using Thematic Coding Analysis. Results: Pregnant women place low value on early antenatal care due to the fact that they perceive pregnancy as a normal health condition or not a serious issue that requires seeking health care. Furthermore previous pregnancy outcomes that were positive regardless of accessing care made them less motivated to initiate antenatal care early. The booking system is perceived as user-unfriendly with overcrowded conditions, long waiting times and rudeness of some service providers. Cost of services and distance to health facilities with uncomfortable transport and poor road network were identified as perceived barriers. The absence of effective community health programmes, perceived lack of support from parents and spouses, fear of bewitchment and stigma due to cultural beliefs about early initiation of antenatal care were also identified as variables influencing late initiation. Conclusion: Pregnant women lack information on the purpose of early antenatal care. Health facility barriers as well as socio cultural beliefs also have significant influence on timing of antenatal care initiation. The government of Cameroon should strengthen the health system and implement activities that engage communities to improve timing of care seeking for antenatal care and thereby improve the maternal health status of women.

Background

In 2015, about 303,000 women died from pregnancy related causes globally, with 99% of all maternal

deaths occurring in low and middle income countries [45]. Within low and middle income countries, the highest maternal mortality rates are found in sub-Saharan Africa [37]. Within sub-Saharan Africa, the West African region has the highest maternal mortality in Africa, approximately accounting for 20% of global maternal deaths [36]. In West Africa, Cameroon has one of the highest maternal mortality rates with 596 deaths / 100,000 live births [43]. Additionally, in Cameroon, approximately 80,000 women and girls suffer from injuries or disabilities caused by complications during pregnancy and childbirth each year [39]. The major causes of maternal mortality in Cameroon are hemorrhage, malaria, complications from unsafe abortion, hypertension, anemia and pneumonia [33].

The skewed nature of maternal deaths demonstrates that the majority of maternal deaths can be prevented through timely interventions by skilled healthcare providers whether during antenatal, delivery or post-partum period [19, 7]. With regards to antenatal care, it serves as a key entry point for a broad range of services that enables the detection and management of risky conditions associated with pregnancy and child birth.

While research has demonstrated the benefits of antenatal care through improved health of mothers and babies, the exact components of antenatal care and what to do at what time have been matters of debate [20]. Initially, the high risk approach aimed to classify pregnant women as low risk and high risk based on predetermined criteria and involved many visits [41]. This approach was hard to implement effectively since many pregnant women had at least one risk factor, and not all women developed complications. At the same time, some low risk women did develop complications, particularly during child birth [20]. After the 2001 systematic review, the World Health Organization (WHO) moved away from the high risk antenatal care model developed largely for high income countries [41]. The revised model was based on reduced but goal oriented clinic visits (focused antenatal care) which consisted of at least four visits to a health facility during pregnancy [41]. More recently, evidence shows that the focused antenatal care model is probably associated with more perinatal deaths than models that comprise at least eight antenatal care visits [44]. Furthermore, evidence suggests that more antenatal care visits, irrespective of the resource setting is probably associated with greater maternal satisfaction than less antenatal care visits [44]. Currently, the 2016

WHO antenatal care model states that antenatal care models with a minimum of eight contacts are recommended to reduce perinatal mortality and improve women's experience of care [44]. Research suggests that in low income countries, particularly sub-Saharan Africa, pregnant women often do not receive the recommended antenatal care services [37]. To ensure that potential complications are identified in early pregnancy and managed effectively, the WHO recommends that women should initiate antenatal care early and have at least eight contacts with healthcare professionals during pregnancy [44].

In West Africa, many pregnant women tend to start antenatal care late especially adolescent women, resulting in them not benefiting from preventive and curative services. In a retrospective study on gestational age at antenatal booking and delivery outcomes in Nigeria, the results reported a prevalence of late booking of 86% [26]. This result is in line with a cross sectional study in southern Benin. In this study in Southern Benin, the primary target was pregnant women attending the antenatal care visit regardless of the length of pregnancy. The results showed that among 301 pregnant women, only 24.6 utilized antenatal care services during the first trimester of pregnancy [27]. Another cross sectional study in The Gambia showed similar results with high rates of late initiation of antenatal care. The study involved 457 women attending six urban and six rural antenatal clinics. The results showed that only 8.1% of the women attended antenatal care within the first trimester of pregnancy while 62.8% and 29.1% attended their first antenatal care in the second and third trimester respectively [6]. Similar to other West African studies, research shows that most pregnant women in Cameroon initiate antenatal care late [18, 25]. In a cross sectional study in the Muea Health Area in the South West Region of Cameroon that is made up of rural/semi urban settlements, findings show that only 27.2% of the women had their first antenatal care visit in the first trimester [18]. Most of the women (69.1%) had their first visit in the second trimester and 3.7% had their first antenatal care visit in the third trimester [18]. The research showed that rural residence was associated with lower antenatal care attendance. Semi urban women were more likely to initiate antenatal care early or attend four times or more than rural women. Financial constraints were the most significant barrier to early initiation of antenatal care [18]. This is because payment for services

is out of pocket both in private and public health facilities with no exemption schemes. Community health insurance schemes are weak and not effectively utilized by the population. This is somewhat similar to the results of a cross study in a Suburban Hospital in Buea in the South West Region of Cameroon in which findings revealed that while 60.5% of the women attended at least four antenatal care visits before delivery, only 20.5% of the women attended antenatal care during the first trimester of their pregnancy [25]. In contrast to the study in the Muea Health Area that is a rural/suburban area, for the study in Buea in the Suburban Hospital, socio-demographic and obstetric factors were not found to be associated with attending antenatal care in the first trimester [25]. Consequently we aimed to carry out a qualitative study with women who initiate antenatal care after the first trimester of pregnancy. The aim of the study was to understand the reasons why pregnant women initiate antenatal care late. The study explored the perceptions of pregnant women concerning late initiation of antenatal care and how their experiences influence decisions on timing of antenatal care initiation. This article presents the methods and findings of the study and discusses these findings in relation to previous research on late initiation of antenatal care.

Methods

Study Design.

The study was an exploratory study and qualitative given that it aimed to gain a deeper understanding of the perceptions, opinions and experiences of pregnant women and midwives on factors influencing early antenatal care initiation during pregnancy. Qualitative research can develop concepts that enable the understanding of social phenomena in a particular setting with emphasis on the meaning, experiences and views of participants [28]. It acknowledges that people have different views about a problem and give meaning to their experiences as it is lived and felt [8]. Qualitative research confirms that social interactions are constructed through interaction between people and argues that meaning does not exist on its own [8]. Hence the approach enabled the researchers to collect data through in-depth interviews with an interview guide using questions that were broad and open ended to enable exploration in detail depending on the responses provided. The approach also enabled the researcher to explore the reasons and opinions behind participants responses through

asking probing questions such as why, how and what to gain a deeper understanding of the reasons for late initiation of antenatal care among pregnant women. Understanding this issue from an in-depth perspective of pregnant women helped throw more light on a problem that cost the lives of many women in Cameroon. The information generated will assist planners of health education programmes to develop effective interventions for pregnant women to raise awareness among women of reproductive age on the importance of accessing antenatal care services early to improve maternal health outcomes.

Research setting

The study was conducted in Nkwen Baptist Health Center a semi urban health center located in the Bamenda Health District in the North West Region of Cameroon. Nkwen Baptist Health Center is a faith based outpatient clinic belonging to the Cameroon Baptist Convention Health Services. The health center has a staff of 144 and an average monthly patient attendance of 12,128. Meanwhile the average monthly antenatal care clinic attendance for pregnant women is 358. It cost at least 13,000 fcfa ($26) to initiate antenatal care although it may cost slightly less in public health facilities. This excludes other cost like transport expenses to the health facility and feeding expenses during clinics. Payment for services is out of pocket both in private and public health facilities with no exemption schemes. The Bamenda Health District is an urban and semi-urban area. With about 337,036 inhabitants, the district has 17 health areas and covers a total surface area of 560 square kilometres [13]. There is one main hospital (Bamenda Regional Hospital) that functions as a referral hospital for 17 public, 12 lay private and 5 mission health facilities. The Bamenda health district is located in the North West Region of Cameroon. With Bamenda as its capital city, the North West Region is the third most populated region in Cameroon with an estimated population of more than 1.8 million inhabitants. It has an urban growth rate of 7.95% higher than the national average of 5.6%, and a rural growth rate of 1.16% equal to the national rate [4]. Over 80% of the natives depend on agriculture for their livelihood including a strong livestock sector [46]. The region has a poverty rate of 51%. The population is young with 62% of its residents below the age of 20 years [4].

Sampling and recruitment

The study sample comprised of eighteen pregnant women and three key informant midwives. The inclusion criteria was pregnant women who presented for their first antenatal care after twelve weeks of pregnancy. The exclusion criteria were pregnant women who were less than eighteen years of age, and pregnant women who could not express themselves in English. Participants were also selected through purposive sampling. There were asked some key demographic questions including number of weeks of gestation to determine their eligibility for interview. There were age variations in the recruitment of participants to ensure that data on the opinion and experiences of young women as well as old women were captured. Participants were selected in terms of number of gravida and parity. This is because women who are experiencing pregnancy for the first time will have a different perception of antenatal care than those who have experienced it a number of times. Marital status was also considered to ensure that both married and single women were interviewed as marital status may have an influence on timing for antenatal care initiation. A minimum of three respondents were interviewed in each category of variation in respondents as showed in table 1 below. Key informants were made up of midwives serving at the antenatal care unit. The inclusion criteria was midwives who had been serving in the antenatal clinic for at least two years. Their recruitment was through the head of the antenatal care unit. These midwives were included on the basis that they had been working and interacting with pregnant women and could provide information on their perceptions and views regarding timing of antenatal care initiation. Interviewing midwives in addition to pregnant women was a means of triangulation of data sources in order to improve on the credibility of the findings

Pregnant women who initiate antenatal care after the first trimester were informed about the study by service providers at the antenatal care unit during the process of provision of antenatal care services. Respondents were only informed of the study at the end of their visit at the antenatal care unit to ensure that the study did not interfere with their access to care. They were informed that participation was voluntary and that if they wish to participant, they will be referred to the researcher for interview in a room in the clinic. Those who accepted to participate were given a slip by the service providers to indicate that they were informed of the study and directed to the researcher for

interview.

Data collection method

Data collection was through in-depth interviews. Interviews were face to face. This method provided a rich form of data as the participant was visible to the interviewer who could pick up on non-verbal cues. Questions were asked from a predetermined interview guide. These guides had short list of questions with probes that helped direct the interview in a fluid, conversational manner in a particular direction. Probing was a vital tool for ensuring the credibility or true value of the data as it allowed for the clarification of interesting and relevant issues raised by the respondent. This provided rich descriptions of the understanding of study participants and provided a comprehensive picture of the phenomenon. Some of the points that were used to develop the interview guide and probes included; socio-demographic characteristics, obstetric history, feelings about current pregnancy, support by partner and family, perception of value of antenatal care, perception of when to initiate, knowledge of pregnancy problems, source of education regarding pregnancy and experience of antenatal care initiation process and antenatal care services. Data recording was through audio taping. This allowed the interviewer to prepare transcript for analysis, based on a verbatim account of the interview. With data recording, the interviewer was able go back to the recording multiple times as needed to catch things that were missed. Written notes also recorded information as a supplement to the audio recorded data. Data analysis was alongside data collection and stopped once saturation was reached. Each interview took between thirty minutes to one hour and was assigned a code and a date to maintain confidentiality. At the end of each interview, audio recordings were transcribed verbatim and by the researcher and analyzed manually using Thematic Coding Analysis. The researcher's diary notes were collated and analyzed at the end of each day to ensure reflexivity. The notes were referred to during the process of transcription and data analysis. Electronic data such as audio tapes recordings and transcriptions were stored on the researcher's computer with security codes to limit access to anybody out of the study. Backups were maintained on an external hard drive and kept in a locked drawer in the researcher's office at the work place. Hard copies of data such as note books, consent forms were also securely locked in the drawer. Only the researcher was in possession of the

key to this drawer.

Data analysis

Data analysis was done manually using Thematic Coding Analysis (TCA). Thematic Coding Analysis is an inductive analysis in which categories or codes are allowed to emerge from the data [30]. The five phases of TCA done were as follows; familiarization, coding, identifying themes, reviewing and refining, integration and interpretation [14]. The researcher familiarized himself with the data by repeatedly listening to the audio recordings of the interviews. The transcripts were also read through multiple times. This allowed the researcher to develop a deep understanding of the data [31]. The researcher noted down key impressions in his researcher diary during the process of listening to the audio recordings and reading the transcripts. Coding involved desegregating textual data into segments, examining the similarities and differences in data and grouping together conceptually similar data. Coding was done by assigning a key topic or theme to a sentence or paragraph that relates to an issue of interest in the study [30]. As the transcripts were coded, a list of codes was developed with each code briefly defined. Each time a passage was found that could not be coded with any of the previous codes it was assigned else a new code was created [12]. Themes were developed by examining codes to identify those that can be grouped together [32]. After reflection, a broad descriptor was assigned to them to identify their commonality. As a list of codes emerged, focus was on broader patterns in the data, combining further coded data into proposed themes or creating new themes [11]. This phase involved two levels. The first level involved reading the collated extracts for each theme and ensuring that they appear to form a coherent pattern. Once themes captured the collective meanings of the coded data (thematic map), the researcher moved to the next level. In the second level, the researcher studied the individual themes in relation to the data and also whether the thematic map correctly reflects the meanings manifested in the overall data [14]. This involved describing the scope and content of each theme. It also involved developing an argument using the data that responds to the research questions. The researcher continuously reflected on the setting and context to help interpret the phenomena. The researcher also drew on existing research to inform the interpretation and strengthen and support the argument [14].

Rigor

Rigor or trustworthiness is a means of judging the credibility and dependability of the study [10]. Triangulation of data sources was through interviewing pregnant women and midwives. Transferability of the study was facilitated by describing the setting, participants, themes and the assumptions that are central to the study in rich detail [10]. An audit trail which provides clear documentation of all research decisions and activities to increase credibility of the study was maintained [5]. Audit trial was ensured by documenting the inquiry process through journaling and memoing, keeping a research log of all activities, developing a data collection chronology, and recording data analysis procedures clearly. Key points at the end of each interview were summarised and verified with the participants to ensure that the understanding and interpretation of their experiences and perceptions was accurate. Reflexivity ensured validity of the study by establishing a report on the researcher's assumptions, values, and biases that may shape the inquiry [9]. A documentation of personal thoughts and feelings was maintained throughout the study process for personal monitoring and reflections.

Ethical considerations

Participation in the study was voluntary for pregnant women and midwives. Respondents were only informed of the study by a staff at the end of their visit at the antenatal care unit to ensure that the study did not interfere with their access to care. They were each provided with a letter explaining the study, requesting their participation and assuring them of confidentiality. Their consent was sought and a consent form was available for them to sign if they were willing to participate in the research. Participation in the research did not inhibit the respondent's access to care. Anonymity of participants was assured by ensuring that questions that revealed the identity of participants were not asked and that the results were not linked to their identity in anyway. There was also the use of pseudonyms in the presentation of findings to ensure anonymity. It was anticipated that the research was going to cause no harm to the research participants. However, a professional counselor of Nkwen Baptist Health Center was available in case any of the pregnant women required emotional support or counseling as a result of the research process. Ethical clearance was obtained from the Biomedical

Research Ethics Committee of the University of the Western Cape (UWC) and from the Institutional Review Board (IRB) of the Cameroon Baptist Convention Health Services. There was also administrative clearance from the Director of Health Services of the Cameroon Baptist Convention Health Services authorizing the researchers to have access to the research participants at Nkwen Baptist Health Center.

Conceptual framework

The Health Belief model was used for the conceptual framework of the study. The model postulates that health seeking behavior is influenced by a person's perception of a threat posed by a health problem and the value associated with actions aimed at reducing the threat [47]. In the context of this study, the health belief model is used to identify perceptions of seriousness, susceptibility and barriers that might explain why some women do not initiate antenatal care early. It also identifies possible cues to action and modifying variables that might change the behavior of late antenatal booking.

Results

Eighteen pregnant women and three midwives were interviewed. The socio demographic details of the pregnant women are summarized on Table 2. The interviews identified a variety of reasons for late initiation of antenatal care which are summarized according to the following themes:

Perceived susceptibility/ perceived severity

Value of early antenatal care
Pregnancy as normal health condition
Ideal Misconception of booking time
Obstetric history

Perceived barriers

Accessibility of antenatal care services
High cost of initiating antenatal care
Distance to health facility

Cues to action

Community health education

Self –efficacy

Pregnancy disclosure
Support from spouse
Reaction from parents

The participants and researcher's reflections about the setting and context were incorporated into the findings to give a richer description of perceptions on reasons for late initiation of antenatal care.

Perceived susceptibility/perceived severity of antenatal care

These are perceptions that early initiation of antenatal care is not relevant or that there are no serious health implications of being pregnant that require early initiation of antenatal care. Themes that emerged under these perceptions were; value of early antenatal care, pregnancy as normal health condition, ideal booking time.

Value of early antenatal care: Some of the pregnant women had the perception that the main purpose of early initiation of antenatal care was to know the state of the baby and since the baby was not fully formed in the first trimester, early initiation of antenatal care was perceived as a waste of time or waste of money.

I could not come for ANC by one or two months [of being pregnant] because the fetus was not yet formed so that I can do echography and know how the baby was doing. It was so early, so being so early like that it would have just been waste of time. (P1, single, age 22, parity 0)

You need to go for antenatal care when pregnancy is big so that they can check the baby well. It's just that when I hear someone saying they are going for antenatal at two or three months [of pregnancy], I judge that it's because they have money to waste. I cannot just waste money like that. (P7, married, age 21, parity 2)

Some women recognized the importance of early antenatal care but lacked the insights of its purpose for pregnant women and instead had a general understanding that pregnancy required antenatal care at some point.

Early antenatal is good…because I am pregnant, and it [antenatal clinic] is a place where when you are pregnant and preparing to deliver you must appear. Had it been I was not pregnant, I could not be here, so I believe I am in the right place. (P8, married, age 22, parity 1)

Pregnancy as a normal health condition: Many of the pregnant women considered pregnancy as a normal life event rather than as a condition that requires attention of health personnel. Some of the pregnant women said they waited to seek antenatal care only when they felt unwell.

For me I don't really see it that necessary to come for antenatal care clinic that early at two or three months because first of all am not sick, am just normal, am fine and there's nothing wrong with me. (P17, married, age 40, parity 3)

There was no problem within the first three months, so if there was a problem, that's when I would have rushed and come earlier. (P2, married, age 27, parity 0)

Key informants also said most of the pregnant women who initiated late perceive antenatal care as a curative rather than as a preventive service.

They [pregnant women who initiate antenatal care late] feel antenatal care is curative issue meanwhile that's not the case. Antenatal care is preventive……this causes them to wait until they have a health problem before they come for antenatal care. (KI1)

Ideal Misconception of booking time: Some women said because the purpose of initiating antenatal care was to diagnose any problems that the baby may be having, the ideal booking time is after the first trimester when the baby must have been properly formed.

I know that it is normal [ideal time] to come for antenatal clinic as from four or five months… at that time you can be able to know better how the baby is fairing. (P13, married, age 27, parity 2)

Many women did not have correct information on the ideal booking time due to misinformation from family members, inadequate health education during clinics.

As I was growing, my mother used to teach me all those things, that when a woman is pregnant she needs to go for clinic as from 4 to 5 months of pregnancy so that the nurses can know if the baby is doing fine. (P2, married, age 27, parity 1)

[The nurses] in the health talk [education] when I came here last time when I was pregnant [for five months] did not tell us that a pregnant woman should start clinic when she is just one, two or three months pregnant. I have not heard this before, it is very new to me. (P12, married, age 23, parity 1)

Obstetric history: Women with positive obstetric history perceived pregnancy and safe delivery as normal experience and did not see the need to initiate antenatal care early.

[As for previous deliveries] I did not have complications, am always fine. I always come for antenatal care clinic later than this [five months] usually seven months when its almost time for me to give

birth. I have always been delivering safely so I have no problem … I believe is just going to be the same because the previous ones I just delivered safely, and this is even the forth pregnancy. (P17, married, age 40, parity 3)

Key informant midwives said positive obstetric history caused some pregnant women to see antenatal care as a routine and preferred to book later.

As women deliver more some of them think they know much and will not want to come and book earlier. They think that antenatal care clinic is just a routine, they just think that since they have been going for antenatal care clinic for the previous pregnancies there's no need booking early. (KI2)

Among the pregnant women, there was one case with a negative obstetric history. Due to her blood group and that of her spouse, all their previous children had the sickle cell disease and did not survive. This influenced her to delay initiating antenatal care because she was contemplating terminating the pregnancy.

I lost two children in the past due to our electrophoresis status [incompatibility of her blood group with that of her spouse]. I aborted the third and this is the forth pregnancy and I am not happy about it all…I decided to come now because I was still thinking whether to keep the pregnancy or not [terminate]. (P16, married, age 27, parity 0)

Perceived barriers to antenatal care

These are barriers that prevent pregnant women from initiating antenatal care early. Themes that emerge under perceived barriers are; accessibility of antenatal care services and distance to health facility.

Accessibility of antenatal care services: Some women said the booking system was user-unfriendly, with long waiting times and some of the staff were rude making accessibility of services difficult and stressful. This influenced their timing of booking antenatal care.

The problem is the place is too congested, the population is too much, when you come you need to stand on a very long line and aahh its really stressing…standing on the long lines every month from the first month [of pregnancy] and for nine months is something I can't really do….. So I decided to come from five months to the last month so that at least I will not have to stress a lot. (P11, single,

age 20, parity 0)

I was not really pleased with the way the welcome was at the clinic, some of them are very rude, they don't take time to explain things and end up just shouting at us and that's even the most reason why some of us don't like to come early for clinic because we don't want to interact with them. (P18, married, age 38, parity 3)

High cost of initiating antenatal care: Some of the pregnant women said it was expensive to initiate antenatal care. They had to delay initiating care because they needed to plan and raise money to pay for the services.

Let me say within the first two months, things were really difficult for us, so even if I was to start by then, I won't have started. Because you know the town is shaking [socio political tensions] now so everything is difficult. Money is difficult to get …… there would have been no money to pay for tests and drugs within the first two months. (P5, married, age 27, parity 1).

Some women said they could not afford to pay for antenatal care services and delayed initiating antenatal care in order to reduce the number of clinic visits, thereby reducing the total cost of antenatal care during the entire pregnancy period.

You know there are financial challenges, there is a lot of hardship here and you have to pay for the cost of antenatal care … to start coming from the first month [of pregnancy] to the last month like that I don't really have money because it is expensive to be coming from the first month to the last month, no, no, I cannot afford money to pay. (P17, married, age 40, parity 3)

Midwives concurred that initiating antenatal care is expensive ($26) to many pregnant women and lack of finances is one of the reasons why many of them book late. This amount is too high for women within this community to afford in order to initiate antenatal care.

For first booking you spend at least 13,000 fcfa [$26] and they always see early booking to be expensive to them…… we always at least attend to them and give them services according to the money they are able to have and tell them to go and look for money and come and finish their lab tests. (KI3)

Distance to health facility: Some women said that the distance to the health facility was far and

that transportation difficulties to get to the facility caused them to postpone initiating antenatal care early.

I do have difficulties of transport to come for clinic. You know the distance is far and I use bike [motor cycle], am always very dizzy, that makes it difficult [to initiate clinic early] (P11, single, age 20, parity 0)

Even though we have tarred road but the only means of transport is bike we don't have taxi. It's difficult with this pregnancy to climb on a bike, you are not confortable, you are not sitting well so most at times you find yourself trekking for long to where you can see a taxi to come for the clinic … when you just think how you start trekking or climbing on a bike and start rolling down a long distance with all the wind it discourages you from going [initiating] for clinic early. (P18, married, age 38, parity 3)

Cues to action

These are triggers that can cause a pregnant woman to take necessary action to initiate antenatal care early. The absence of these cues can caused pregnant women to initiate antenatal care late. The theme that emerged under cues to action was community health education.

Community health education: The absence of community outreach programs that could sensitize women on the need to initiate antenatal care early caused some pregnant women to initiate late.

To say health workers come to the community to educate us on how to go about [early antenatal care initiation] when you are pregnant, I have not seen that… [As far as] seeing a doctor or a nurse coming around our quarter to help us enlighten [educate] us on pregnancy and [early] antenatal care, I have never seen. (P18, married, age 38, parity 3)

These pregnant women are ignorant on things about pregnancy and [early] antenatal, they lack education…we lack a forum where we can really educate women in the community on early start of antenatal clinic… (KI1)

Self – Efficacy

This is the confidence that enables a pregnant woman to be motivated to take action. It is influenced by socio economic and demographic factors. In this study, some pregnant women did not believe that

they were capable of taking the decision to initiate antenatal care within the first trimester. Themes that emerged under self – efficacy were; cost of initiating antenatal care, pregnancy disclosure, support from spouse, reaction from parents

Pregnancy disclosure: Some of the participants initiated antenatal care late because they wanted to delay making the pregnancy public because of fear of perceived “enemies” who may harm their pregnancy.

I did not come before this time because I did not want people to know especially people who don’t wish me well, my enemies. (P2, married, age 27, parity 1)

Other women said they delayed making their pregnancy public because they were shy or ashamed when the pregnancy was still small. It was noted that stigma associated with early pregnancy disclosure influenced both married and unmarried women on the timing for antenatal care booking.

Pregnancy in our culture even though you are married it has some types of conceptions. At times I am shy and so I will not want my neighbors and people around to first of all know …. Culturally you feel shy…. even though married, it has a little aspect of shame related, you don’t feel comfortable you just feel a type [unconfortable]. (P18, married, age 38, parity 3).

One of the key informant midwives said unmarried women especially young girls also hide the pregnancy within the first trimester due to the shame that information of their pregnancy will bring on their parents.

Most pregnant women at the beginning of pregnancy are always shy especially those who are not married, they shy away first of all because they don’t want their neighbors, or their immediate family members to know that they are pregnant so they hide the pregnancy seriously……some are ashamed for fear of stigma that their neighbors will laugh at their parents that though she was so holy she is not married but is pregnant. (KI1)

Some of the women said community members consider early antenatal care as a show of pride and do mock at women who initiate antenatal care early.

So for us we believe that you only start going for clinic when the stomach is already very big as from six months. Because when you go for antenatal care at one or two months when the baby is still small

is like you are boosting of something, proud which does not really speak well of you[in the community]. (P17, married, age 40, parity 3)

Support from spouse: In some cases, lack of support of the spouse contributed to late initiation. Lack of trust made some husbands not to believe their wives when they (wives) told them that they were pregnant. This made the husbands to be reluctant to provide money for early initiation of antenatal care.

Whenever I tell the father of my children that I am pregnant he usually take it for a lie…each time I request for money to go for clinic he is not willing and will ask me to wait and he will give it [money] at his own time. (P7, married, age 21, parity2)

Lack of knowledge on ideal booking time by husbands also contributed in weakening the support they gave to their wives to initiate antenatal care early

I was not given money on time by my husband and when I said I was pregnant and needed to go for antenatal care early he thought I was lying…It took many months before he gave me money….. He thought one needed to go for antenatal care at 6 months [of pregnancy]. (P14, married, age 18, parity 0)

Marital misunderstanding was also identified as one of the reasons that caused many husbands not to support their wives to book early.

Sometimes he [husband] is not understanding, what I will actually want from him he will not even give me. Like this food they are telling us to go and eat, I don't know how I will explain to him because according to him he thinks that I just want to take his money and eat… he just get angry and say, why are you struggling to go, you just want to waste my money. (P18, married, age 38, parity 3).

Reaction from parents: Most of the unmarried women especially young girls said fear of negative reaction from parents led to late disclosure of pregnancy and hence contributed to late initiation of antenatal care.

My parents were not going to welcome the pregnancy since I was just a student …so telling them when the pregnancy was still one or two months or so it would have been a taboo or something and I will surely be beaten…my parents are wild and there could do anything, so I was scared [and decided

to hide the pregnancy from them]. (P11, single, age 20, parity 0)

Discussion

Our study identified four key themes on the basis of which we explain the reasons for latec initiation of antenatal care namely: perceived susceptibility/ perceived severity due to late antenatal care initiation; perceived health systems barriers to early antenatal care; Cues to action; and self – efficacy. Explanatory sub-terms of the findings were elaborated and placed in the context of the broader literature.

Perceived susceptibility/ perceived severity due to late antenatal care initiation

A major finding of the study was the lack of knowledge on the purpose of early antenatal care and therefore the right time to initiate antenatal care. This lack of understanding is also influenced by a perception that antenatal care is primarily to detect or treat diseases. This explains reasons why many participants said they did not have any problems in early pregnancy that needed the intervention of health personnel. Some respondents assumed that there were no benefits in booking in the first three months. There is a perception that women can successfully go through the first trimester of pregnancy without antenatal care. They view whatever health issues as a normal health condition or not serious to require that they seek for healthcare. These are the arguments that were used by those that were advocating for a goal oriented antenatal care visits. Hence antenatal care is perceived as a curative rather than a preventive intervention. This is in line with a study by Ndidi and Oseremen in which they reported that most women book antenatal care late because of the belief that there are no advantages in booking for antenatal care in the first three months of pregnancy [24]. Some of the women were aware of the importance of early antenatal care but lacked insight into its comprehensive purpose. The value of early initiation of antenatal care was not well described and most often focused on curative or as preparation for delivery, as was found in a study in rural South Africa [23].

In this study, some participants believed that there was no ideal booking time for antenatal care similar to a study in Southern Nigeria in which the majority of pregnant women claimed that it was safe to book antenatal care at any time during pregnancy [40]. There were diverse reasons for lack of

information on ideal booking time. Some participants responded that they were never informed of the ideal booking time by service providers during previous antenatal clinics. Health education programmes during antenatal care clinics failed to address the issue of ideal booking time and multi gravida cases who booked late in previous pregnancies were likely to continue with the same practice during subsequent pregnancies. In a study in Buea Health District in Cameroon, few and ineffective health education sessions by service providers during antenatal care clinics was highlighted to be related to poor utilization of antenatal care services by pregnant women [18]. It has been found that past experience on antenatal care service is not a predictor for timely booking of antenatal care [3]. In this study, some participants responded that they grow up and observed their mothers initiate antenatal care later in pregnancy. Others said they were advised by their mothers or spouses to initiate antenatal care after the first trimester. The study reveals the important role parents or spouses play in deciding the time of booking for antenatal care. There is need to develop health education programs that empower parents and spouses to improve their knowledge on the importance of early antenatal care services. In a study in southern western Nigeria incorrect advice on the best time to start antenatal care from relatives or partners was highlighted as some of the reasons that women in their first pregnancies were starting antenatal care late [2].

Multigravida participants said they used previous positive pregnancy outcomes as experience for them in handling subsequent pregnancies. Previous positive pregnancy experiences made pregnant women develop confidence and thus were less motivated to initiate antenatal care early. This is in line with another study that found that multiparous women are usually confident, believing that having delivered many times previously, they are well versed with the art and need not book for antenatal care early [40]. On the other hand, previous negative pregnancy outcomes influenced some of the participants to delay initiating antenatal care because initially they planned to terminate the pregnancy. This is similar to a study that found that some women postpone initiating antenatal care until they are free from a perceived obligation to terminate the pregnancy. This may occur with unplanned pregnancies after the woman may have gone through a bad obstetric history [17].

Perceived health systems barriers to early antenatal care

Some respondents perceived the booking system as user-unfriendly. They complained of overcrowded conditions; a lot of movements between the consultation room, laboratory, ultrasound sound and pharmacy that are far from each other; long waiting times and rudeness of some staff of the clinic. These experiences undermined the quality of antenatal care offered to pregnant women. Women who perceived poor quality services preferred to delay initiating antenatal care to avoid going through the experience at the early stage of pregnancy. Dissatisfaction with care in health facilities including long waiting times, rude and unfriendly attitudes of healthcare providers have been found to be related to late booking among pregnant women [22].

In this study, some participants expressed their inability to afford the cost of initiating antenatal care and had to delay booking until they raised the required amount. While some women said the cost of initiating antenatal care ($26) was expensive, others said the negative economic effects of the socio political tensions in the region have aggravated financial hardship limiting their ability to pay for the cost of booking antenatal care early. Booking for antenatal care require payment for a number laboratory tests and for drugs. In addition, pregnant women have to pay for transport to the health facility. Most of the women in this community are poor. Payment for services is out of pocket and there are no exemption schemes. This system renders many of the women unable to afford for health services. In a low resource setting like Cameroon, financial constraints and distance to the health facility plays a major role in determining the timing of initiation of antenatal care. Distance limits the ability and willingness to seek health care where the road network is poor and the common means of transport is by motorcycles. These reasons are similar to a study conducted in Ethiopia where financial constraints where amongst the commonest reasons for late antenatal care booking [16]. Tolefac et al also found out that in Cameroon distance to nearest health facility and transport cost are strong barriers to early initiation of antenatal care among pregnant women [35]. Uncomfortable transport and poor road conditions have also been found to be barriers to utilization of antenatal care by pregnant women [21].

Cues to action

This study found that there was no community outreach that could serve as cue to action for pregnant

women to initiate antenatal care early. The absence of a community health education programme contributed to the lack of knowledge on ideal booking time that led to late initiation of antenatal care by pregnant women. If women are to be encouraged to seek antenatal care early, the purpose and value of early initiation of antenatal care will need to be communicated across the communities in which they live. Other studies have found that public health strategies within communities are required to raise awareness and promote early antenatal care services among pregnant women [34].

Self – efficacy

In this study, fear of disclosing pregnancy due to community pressures and beliefs was associated with late initiation of antenatal care. Some participants delayed initiation of antenatal care out of shame while others were afraid of being mocked at by community members for initiating antenatal care too early. Fear of bewitchment was also raised as a reason for booking antenatal care late by some women. Fear of perceived “enemies” who can harm the woman’s pregnancy has been found to contribute to late initiation of antenatal care [24]. This may also support the findings that social norms like seeking advice from village elders before disclosing pregnancy are still dominant in decision-making process on timing for antenatal care initiation [29]. Some participants responded that unplanned pregnancies especially among young singles were in most cases associated with late disclosure to the parents for fear of potentially negative reaction. Perceived lack of parental support translated into late initiation of antenatal care. Social support has been shown to facilitate early antenatal care attendance [1]. Lack of support from spouses by not providing the money required to cover the cost of antenatal services or by discouraging early initiation was highlighted by some of the participants as reasons for delayed initiation of antenatal care. These women had to wait for the spouse to decide for them on when to start clinic. The spouse did not either provide the cash to cover the cost of antenatal care or was ignorant of the importance of early antenatal care. In our society, husbands play a key role in decision making for women hence the need to involve men in health education programmes that aim at promoting effective utilization of antenatal care services. Having a spouse who is not supportive was highlighted as being associated with initiating antenatal care late for both adolescent and adult pregnant women in South Eastern Tanzania [15].

Conclusion

The study explores the perceptions of pregnant women on reasons why they initiate antenatal care late. In Cameroon only about 20.5% of pregnant women initiate antenatal care within the first trimester of pregnancy. The study revealed the following perceptions of pregnant women as reasons for late initiation of antenatal care.

Pregnant women place low value on the purpose of early antenatal care due to lack of knowledge of its importance. They perceive pregnancy as a normal health condition or not a serious issue that requires seeking health care.

Pregnant women lack information on the ideal booking time due to the ineffectiveness of health education programmes during antenatal care clinics. Misinformation from family members and spouses are also identified as reasons for lack of information on ideal booking time for antenatal care by pregnant women.

Some participants perceive the booking system as user-unfriendly and complained of overcrowded conditions, long waiting times and rudeness of some clinic staff. Women who perceive poor quality services prefer to delay initiating antenatal care in order to avoid going through the experience at the early stage of pregnancy.

High cost of initiating antenatal care as well as distance to health facilities with uncomfortable transport and poor road network are also identified as barriers to early initiation of antenatal care.

The absence of community health education programmes that could serve as triggers for early antenatal care contributed to the lack of knowledge on ideal booking time. This caused some pregnant women to initiate antenatal care late.

Perceived lack of support from parents for unmarried young women and lack of support from spouses for married women translated into late initiation of antenatal care. Fear of bewitchment and stigma due to cultural values and beliefs about early initiation of antenatal care were also identified as variables influencing late initiation.

These findings are still the same with what was found by other researchers more than twenty years ago. The big question for reflection is whether Global Development Goals made any differences in maternal health services and outcomes in countries like Cameroon. There is need for the government of Cameroon to effectively implement activities that engage communities to improve timing of care seeking for antenatal care and thereby improve the maternal health status of women. Service providers need to implement strategies that will strengthen health facilities to enable them provide quality services to pregnant women.

Abbreviations

ANC: Antenatal Care; HIV Human Immunodeficiency Virus; IEC Information Education and Communication; IRB Institutional Review Board; KI Key Informant; P Participant; PMTCT Prevention of

Mother to Child Transmission; TCA Thematic Coding Analysis; UNICEF United Nations Children Fund; USAID United States Agency for International Development; UWC University of the Western Cape; WHO World Health Organization

Declarations

Ethics approval and consent to participate

Ethical clearance was obtained from the Biomedical Research Ethics Committee of the University of the Western Cape (UWC) and from the Institutional Review Board (IRB) of the Cameroon Baptist Convention Health Services. Participation in the study was voluntary for pregnant women and midwives. Respondents were each provided with a letter explaining the study, requesting their participation and assuring them of confidentiality. Their consent was sought and a consent form was available for them to sign if they were willing to participate in the research.

Consent for publication

Not applicable

Availability of data and material

Not applicable

Competing interests

The authors declare that they have no competing interests

Funding

Not applicable

Authors’ contributions

DW conceived the original ideas, wrote the protocol of the study, secured ethical approval, recruited the participants, conducted interviews, analyzed the data and wrote the findings up for publication. AG supervised the data collection, data analysis and the writing of the findings for publication. All authors read and approved the final manuscript.

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Tables

Table 1: Study Sample

n = 21		
Type of variation/Respondents		No. of respondents
Age	18-32 years	3
	33-49 years	3
Gravida	Gravida 1, Para 0	3
	Gravida >=2, Para >=1	3
Marital Status	Single	3
	Married	3
Key informants	Midwives (>= 2 years of service)	3
Total		21

Table 2: Participants socio demographic information

Participant Code	Marital Status	Age	Gravida	Parity
P1	Single	22	1	0
P2	Married	27	2	1
P3	Married	35	3	2
P4	Married	28	2	1
P5	Married	27	2	1
P6	Married	24	2	1
P7	Married	21	3	2
P8	Married	22	2	1
P9	Married	25	2	1
P10	Single	21	1	0
P11	Single	20	1	0
P12	Married	23	2	1
P13	Married	27	3	2
P14	Married	18	1	0
P15	Married	34	3	2
P16	Married	27	4	0
P17	Married	40	4	3
P18	Married	38	4	3

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