

## ORIGINAL RESEARCH



# Perceptions of pregnant adolescents on the antenatal care received at Ndirande Health Centre in Blantyre, Malawi

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## Abstract

### Background

Rates of adolescent pregnancies in Malawi remain high at 29%. Early childbearing is a major health issue because of its increased risk for adverse pregnancy outcomes compared to older women. Although antenatal care is believed not to directly reduce maternal mortality, comprehensive antenatal care, especially in developing countries, may promote safe motherhood as actual and potential problems related to pregnancy are identified and treated in a timely manner. While antenatal services in Malawi are meant to provide antenatal care for adolescents, much of the care provided seems to be limited. The purpose of this study was to explore views of pregnant adolescent girls about the antenatal care they received at Ndirande clinic. Understanding adolescents' views about the care they receive may provide an opportunity to identify gaps in the care and ultimately improve the care for pregnant adolescent girls.

### Methods

We conducted a cross-sectional exploratory study on pregnant adolescent girls' perceptions of the antenatal care received at Ndirande Health Centre in Blantyre, Malawi, from 7 to 28 October 2011. We interviewed 15 purposively selected pregnant adolescents aged 14 to 19 years using a semi-structured interview guide. All the interviews were audiotaped, transcribed verbatim and translated from Chichewa into English. Data were analyzed using thematic content analysis.

### Findings

Two major themes emerged from the findings: a) caring b) motivation for attending antenatal care. The findings indicate that pregnant adolescents view the establishment of a clinic as acceptable and feasible. However, the care was inadequate, as it did not meet the expected standards and the needs of the pregnant adolescents.

### Conclusion

The antenatal care adolescent girls received at Ndirande clinic is inadequate as it does not meet their needs. Innovative models of care that embrace the principles of youth friendly services should be employed.

## Introduction

Adolescent pregnancy is a global public health concern because it is associated with physical and psychosocial problems owing to teenage immaturity<sup>1,2</sup> and accounts for 11% of births occurring in low and medium-income countries<sup>3</sup>. The average global birth rate among adolescents is 49 per 1,000 girls, with Sub-Saharan Africa leading at 120 per 1,000 girls<sup>4</sup>. Pregnancy and childbearing carry greater risks of mortality and morbidity for adolescents. The significant risks associated with adolescent pregnancy include preterm births, hypertensive disorders, anemia, poor nutritional status, repeat pregnancy and psychosocial issues such as stress, depression and anxiety<sup>4,7</sup>. Pregnant adolescents experience complex psychosocial problems compared to older pregnant women because of the low self-esteem and stigma associated with adolescent pregnancy<sup>8,9</sup>. In addition, stress and rejection may lead to unhealthy behaviors such as smoking, drinking beer and poor nutritional intake resulting in adverse perinatal outcomes<sup>6,10-12</sup>. Furthermore, it is reported that complications related to pregnancy among adolescents is the second cause of mortality among this age group<sup>4</sup>. There is a great realization globally that adolescents, particularly young adolescents, are a special group that require responsive care when they are pregnant<sup>4,13,14</sup>.

Malawi has a youthful population with about 40% of the total

population aged 18 years or younger<sup>15</sup>. According to Malawi Demographic Health Survey, 2015-2016, 29% of pregnant women were adolescents, and a substantial number of them reported to have given birth before the age of 18 years<sup>16</sup>. Although facilities have youth-friendly services in order to meet the reproductive health needs of the youth, including adolescents, it seems there are no structures to support the adolescent when she is pregnant. To address this need, Ndirande Health Center and Machinga District Hospital, initiated pregnant adolescent girls' clinics (anecdotal reports). While antenatal services are in existence to promote safe motherhood and improve perinatal outcomes, much of the care provided seems to be limited to certain locations in other low and medium-income countries, due to various factors<sup>17-20</sup>. Studies on antenatal services provided to childbearing women in Malawi and elsewhere have yielded mixed results with the majority of respondents reporting dissatisfaction with care<sup>18,21-23</sup>. Reasons for dissatisfaction ranged from perceiving the care to be of poor quality, limited understanding on the importance of antenatal care, long waiting periods at the clinic and unsupportive clinic environment<sup>17,21</sup>. To date there is limited information about the antenatal care provided to pregnant adolescents at their established clinics. In this study, we explored the views of pregnant adolescents towards the antenatal services they

receive at Ndirande Health Centre in Blantyre, Malawi, specifically their perceptions of the care received.

## Methods

### *Study design*

We conducted a qualitative exploratory study at Ndirande Health Centre from 7 to 28 October 2011 among pregnant adolescents to describe their perceptions of the antenatal care services that they receive. The design allowed the researchers to have a deep understanding of pregnant adolescents' views towards the antenatal care they receive.

### *Study setting*

Ndirande antenatal clinic falls under the authority of Blantyre City health services. The clinic is located in one of the densely populated townships in Blantyre, in the Southern Region of Malawi. The facility serves a population of 115,175, of which 26,490 are women of childbearing age. The facility provides antenatal care to clients of all ages. We selected Ndirande antenatal clinic because the facility was a pioneer in establishing an adolescent antenatal clinic in Blantyre. At the time of the study, the clinic had been running for six months with antenatal care clinical services offered once a week. About 40 pregnant adolescents attend the clinic every week. An Enrolled Nurse Midwife (ENM) manages the clinic and provides youth-friendly health services. The adolescent antenatal clinic is an extension of the youth-friendly services offered at this facility.

### *Sample*

We purposively selected 15 pregnant adolescents based on their knowledge regarding the services offered at the adolescent antenatal clinic; the respondents were recruited by the researcher. Demographic variations such as age, marital status, number of antenatal visits and educational level were considered during the sampling in order to have diverse views on the antenatal services offered to pregnant adolescents<sup>24</sup>.

### *Selection and recruitment of participants*

We recruited adolescent participants that: a) were pregnant, regardless of HIV or marital status, b) were willing to give consent and be interviewed, c) attended adolescent antenatal clinic at Ndirande for not less than two times, and d) were in their third trimester and within the age bracket of 14 to 19 years. We met potential participants and explained the purpose of the study before the participants received antenatal services. We obtained informed consent from all participants who met the criteria and accepted to participate prior to any study procedures.

### *Data collection*

A semi-structured interview guide was developed to aid data collection. Prior to data collection, an independent researcher checked the interview guide for content and their comments were incorporated. We collected data once from each participant using the interview guide, which helped in gathering views pregnant adolescents had regarding the antenatal services they received. Each interview took 30 to 45 minutes and was conducted in Chichewa, the local language. The interviews were audio-taped. After each interview, key issues from the interview were noted and summarized to the participants for data verification<sup>24</sup>. Key findings from each interview were summarized soon after the interviews and were shared with the participants for member checking<sup>24</sup>. In

addition, we probed for more information throughout the interview period to allow each participant to share their own personal perspectives. Field notes were taken to incorporate contextual factors that could not be tape-recorded, but could add meaning to the research findings. Data saturation was reached after interviewing 12 participants as no new substantive information was gathered; three more participants were included to validate the results.

### *Data management and analysis*

The tape-recorded data was transcribed verbatim in Chichewa and later translated into English. To ensure accuracy, the researcher reviewed each transcript by comparing it with the tape-recorded information. Furthermore, an independent person listened to the recorded interviews and verified the translation to ensure precision. Manual data analysis was conducted using thematic content analysis concurrently with data collection in order to detect and correct errors during the subsequent interviews. The researcher read one transcript several times to familiarize herself with the data. This was followed by open coding which was done deductively by focusing on study objectives and inductively through the data. A coding framework was developed and it was reviewed by an independent researcher who had also coded the data for validation of the codes. After discussing the codes, a final coding frame was decided which was used to code the rest of the transcripts while observing emerging codes from the data. The codes were organized into categories and themes based on their similarities and recurrence. The researcher verified themes by checking them against the audio taped data. The researcher ensured validity and reliability by immersing herself into data<sup>25</sup>.

### *Ethical considerations*

Permission to conduct the study was granted by the College of Medicine Research Ethics Committee (COMREC) while institutional permission was obtained from the Blantyre City Assembly, District Health Office and Ndirande antenatal clinic. Written informed consent for participation and digital recording of the discussions was obtained from each participant. Each participant was informed that participation is voluntary and that they could withdraw their participation at any point without repercussions. To maintain privacy, interviews were conducted in private. Anonymity was ensured by using codes for identification of the participants. Study documents were locked in a cabinet and digital documents were password protected to guarantee confidentiality.

## Results

### *Demographic data of participants*

A total of 15 adolescents, with a median age of 17, participated in the study and all were primigravidae. All the participants had basic education and majority attempted secondary education. More than half of the participants were single (Table 1).

### *Themes*

From the analysis of the data two major themes emerged: 1) Caring and 2) Motivation for initiating antenatal care. Each theme had sub-categories.

#### *Theme 1: Caring*

All the participants felt that they were cared for by virtue of having a specific day for antenatal services for adolescents, which also made them believe that their needs would be

met. Since they were of the same age group, they felt free to discuss and share their problems and concerns without feeling restricted by the presence of older pregnant women. Two sub-themes emerged under the main theme of caring, namely: reception, and information and communication.

**Table 1: Demographic characteristics of the study participants (n=15)**

Variable	Finding
Median age in years	17
Educational level	
Primary	5
Secondary (Incomplete)	10
Number of antenatal visits	
Four	1
Three	14
Marital status	
Married	5
Single	10
Gestation at booking in weeks	
1 – 12 weeks (First trimester)	0
13 – 28 weeks (Second trimester)	15
29 – 40 weeks (Third trimester)	0

### Reception

All the participants perceived the reception to be of a high standard, unlike what they had heard about hospital personnel being disrespectful to clients as depicted in the quotes below.

*"The care we received I can say the reception was good. I heard that when you come to this clinic they will touch your abdomen, ask you to be naked and they touch your private parts. But when I came here such things did not happen only good ones happened to me."* [P5]

*"When we came they received us well, they did not shout at us and we were not insulted. I just heard from friends that when you report late for antenatal care, let's say after six or seven months, you are insulted but when I came I was not insulted."* [P5]

However, a few participants had different expectations regarding the manner of reception. They expected that during antenatal care they would be given a drink and be involved in some playful activities as exemplified in the quotes below;

*"When I came I was expecting to have a chance to play like netball and that I will be given a drink like Sobo (soft drink) and do exercises like what we were doing at the youth club."* [P6]

*"They should tell us folktales."* [P1]

### Information and communication

Participants in the study stated that they were counselled on pregnancy related aspects such as maintaining a healthy life, personal hygiene, nutrition, exercise and stress management, birth preparedness, benefits of knowing one's HIV status and guidance on maternal future goals (prioritizing education over early marriage). The commonly mentioned messages were HIV and its management, resumption of school after delivery and birth preparedness, as shown in the quotes below:

*"I also felt happy with the advice concerning HIV transmission from the mother to the unborn baby. The nurse asked us questions on how the baby can get HIV from the mother and we managed to answer her, this made me happy."* [P5]

*"They said when coming (for delivery) we should take a basin, plastic paper, and razor blade and needle and chitenje (wrapper) because these things are very important."* [P2]

*"Everything was good because we were taught about AIDS and how to prevent ourselves from getting it (HIV) we were also taught about birth preparedness what to bring and to care of the baby after birth all in all everything was fine."* [P5]

Most of the participants felt that the information they received was adequate, especially information pertaining to resumption of school after giving birth because it cemented their aspirations.

*"They (health workers) said we (pregnant adolescents) have become pregnant at a very young age, therefore if we can manage after giving birth we can go back to school otherwise if we do not go back we will end up giving birth to babies ending up with problems in our homes. School again will help you to look young because when you give birth to three or four babies we will look old, men will abandon us and they will go for partners who are educated like themselves."* [P10]

*"At least I now know that after giving birth there is a chance to go back to school. I have been enlightened on that one."* [P8]

However, some participants felt that with their current status, they were not given enough information regarding labour and delivery; this caused them to fear labour and delivery as evidenced in the quotes below.

*"They needed to tell us what we should expect during labour, we are young we know nothing and we do not have elders in town who can advise us on these issues so we are afraid."* [P5]

*"They should open up to by telling us clearly everything involved in pregnancy, labour and delivery since this is our first time to be pregnant."* [P6]

One participant stated that the information should be given in an encouraging manner, as they were not experienced in childbirth as narrated in the quote below.

*"Since we are not fully grown we are not up to it, we cannot be able to give birth. So, it would be better if they told us more on what we should expect during labor and delivery rather than telling us that with delivery it is 50-50."* [P10]

However, some participants had mixed views on the mode of delivery of the information with some opting for the counselling to be on an individual basis for privacy, while others preferred the information to be provided in a group setting to facilitate learning.

*"There are many disturbances when you are in a group such as noise and then when you want to ask you feel people may take you as ignorant and you feel you may delay them like."* [P8]

*"...because I had a chance of getting information from different people and in that way you learn a lot of things."* [P11]

Most of the participants felt that the communication about the findings from the physical exam during the antenatal care visit was inadequate.

*"After examination, I was not communicated on anything, nothing. They just wrote in my health passport book well, you cannot know how your baby is positioned or how it is growing."* [P3]

Additionally, a majority of the participants could not remember specific details on the health messages they received during all the visits and most of the participants simply said that the messages received were repetitive in nature.

*"They advised us but I have forgotten what they said but they said a lot of things."* [P7]



*"They talked about other things but I have forgotten them."* [P2]

*"It was the same advice I received about HIV and AIDS and birth preparation."* [P6]

*"They gave us the same message about HIV and that the baby should be protected from contracting HIV."* [P4]

## **Theme 2: Motivation for starting antenatal care clinic**

The primary motivation to initiate antenatal care visits was because of the perceived benefits that participants felt; they derived from the services. The sub-themes, namely, the desire to know about one's HIV status, the access to treatment, and pathway to maternity care all belong under the major theme of the perceived benefits of antenatal care.

### *Desire to know own health status and HIV management*

Although participants acknowledged that it was beneficial to come for antenatal care, most thought it was good because they would know about HIV status and management. Being HIV-negative was associated with good health and the assumption of a "would-be" healthy pregnancy and childbirth.

*"When you come here they can know how your body is whether it is healthy or not because they take blood to test for kachiroambo (HIV) and when you have it they will assist you during birth so that your baby should not catch the disease."* [P4]

*"It helps us to know how to take care of the baby concerning breastfeeding if you have certain diseases (HIV) you are told on how to care for the baby."* [P2]

### *Accessibility to preventive and curative services*

Some participants expressed the view that antenatal clinics were beneficial because clinics provide prophylactic treatments, counselling and guidance on how to stay healthy during pregnancy, and when sick, they could be provided with treatment.

*"The importance is that we are given guidance and advice on how to cope with the pregnancy."* [P14]

*"We receive immunization which we wouldn't have had if we stayed home we are also tested for HIV so we know our status."* [P2]

### *Passport to accessing labour and delivery services*

A few participants stated that attending antenatal care was beneficial as this guaranteed delivery at a health facility without being questioned by the midwife.

*"They (nurse/midwives) reject you because you were not attending antenatal clinics. When you show your antenatal card, they will attend you as fast as they can, therefore it is important to come to antenatal clinic."* [P1]

*"They (nurse/midwives) reject you because you were not attending antenatal clinic."* [P8]

## **Discussion**

We discuss our findings in the context of demographic data and the themes identified from the information gathered. Our findings on delayed antenatal care initiation by all participants until second trimester is similar to studies done in Malawi and other countries which have shown that adolescents and older women delay seeking antenatal care<sup>14,17,18,21,26</sup>. The finding is incongruent with Focused Antenatal Care (FANC) guidelines that recommend women to register for antenatal care as soon as they realize that they are pregnant or before 16 weeks of gestation<sup>9,17</sup>. Early antenatal care initiation is recommended because it promotes the delivery

of effective antenatal care which can prevent pregnancy related complications<sup>27,28</sup>. The late initiation of antenatal care could be explained by the inability of pregnant adolescents to recognize the signs and symptoms of pregnancy, or they may deny being pregnant, especially single primigravidae, leading to delays in booking for antenatal clinics<sup>13,29,30</sup>. Furthermore, inadequate knowledge among the adolescents of antenatal services and stigma associated with adolescent pregnancy may partially explain the delayed initiation of antenatal care for the pregnant adolescents<sup>31</sup>. This is further complicated by the reluctance of parents or older people to share information related to sexual reproductive health with pregnant adolescents because parents or older people may feel that giving adolescents this information may fuel immorality<sup>29</sup>. Designating a specific day for antenatal services for adolescent girls may encourage them to access services as they will not be mixed up with older people who are like their parents. In addition, the recognition that pregnant adolescents are a special group requiring special attention is advocated for globally<sup>6,32-36</sup>.

Our finding that adolescents were pleased with the antenatal care they received is contrary to what other studies have documented of health providers being unfriendly to the youths when they seek reproductive health services, including antenatal care, from health facilities<sup>37,40</sup>. However, although pregnant adolescents were pleased with the care, some participants reported that they expected some youth-friendly activities at the antenatal clinics. Adolescents are still growing and, when designing antenatal care services for pregnant adolescents, the type of care package must take into consideration the transition period they are passing through – from adolescence to parenthood – and the care should be able to make this transition less stressful. In support of this, Novick and Ickovics<sup>5,10</sup> in the United States used a group model of antenatal care called Centering Pregnancy (CP), which integrates extensive health education and group support with standard antenatal examination<sup>41</sup>. Women who received care through CP were compared with women who were given individual antenatal care. Findings indicated that women in CP care were more confident and had low preterm births as compared to the women in the individual model. Therefore, innovations to antenatal services to meet needs of adolescents should be a priority.

The emphasis on HIV and AIDS and birth preparedness, while overlooking other topics in the education of adolescents, as stated in our study, remains consistent with findings from other studies<sup>19,32,38</sup>. Although the participants may have forgotten other topics discussed, the study reports midwives giving more attention to some topics, denying clients relevant information to improve their perinatal outcomes. While education on such topics is likely to improve pregnancy outcomes, issues of labour and delivery and puerperium are vital for the survival of mothers and their babies<sup>17,21</sup>. Therefore, information, education and communication (IEC) content should be organized in such a way that it meets needs of individuals and includes pregnancy, labour and puerperium issues.

Similar observations have been made in studies in Uganda and Swaziland where the majority of pregnant adolescents were uncertain about the antenatal and delivery periods as to whether they would have a live baby and survive the experience<sup>30,42</sup>. Additionally, complications from pregnancy and childbirth are a leading cause of mortality and morbidity

for young women aged 15 to 19 years in developing countries. Therefore, counseling on complications related to pregnancy, labour and puerperium becomes important. In our study, none of the participants were counseled or educated on the issues above except for birth preparedness, which focused on material items that one needs to have during labour and delivery. Similar observations were made in a study on the unmet educational needs of pregnant mothers in Sub-Saharan Africa. The study documented that providers did not routinely provide women with information related to pregnancy complications as part of antenatal care and that information is not conveyed in a way that women remember having received it. For example, more than 50% of women reported receiving no information during antenatal visit<sup>19</sup>.

Some adolescents refrained from asking questions during group education, despite their lack of understanding, for fear of delaying others or to be labeled ignorant. Lack of openness could stem from combining married and unmarried adolescents in their education. As reported in other studies concerning adolescents,<sup>43, 30,38,44</sup> our study revealed that participants rarely received results on the examinations performed. Similar observations were made in a study in Kenya among childbearing women where satisfaction was associated with explanations of findings during antenatal visits<sup>28</sup>. However, the participants in this study reported that they did not bother asking for the findings of their assessments. Reasons could be that they felt powerless, or they felt that asking would mean inviting insults. Evidence shows health care providers' negative attitudes towards adolescents in reproductive health service provision or adolescents' lack of knowledge on what is right for them<sup>35,43</sup>. Another reason could be the perception pregnant adolescents have that midwives do not understand their needs, fears and concerns and the fact that they have little decision-making authority or control over their own health and lives by virtue of being young and dependent<sup>43</sup>.

The participants were satisfied with information concerning HIV and AIDS. Knowledge of their health status made them feel secure. The pregnant adolescents of this study thought it was beneficial to attend antenatal care because they would know about their HIV status and management. Additionally, they associated an HIV-negative status with a good health status which would yield healthy pregnancy outcomes. This limited association between HIV status and good health may potentially help adolescent engage in safer sex practices in the future, which may prevent another unintended pregnancy and acquisition of HIV. However, viewing pregnancy as a lesser evil to HIV poses some danger because this may lead to pregnant adolescents only adhering to HIV prevention messages as opposed to pregnancy prevention, yet both are likely to lead to poor maternal and neonatal outcomes.

## Conclusion

Having a separate day for antenatal clinic for adolescents seems to be an acceptable and a welcomed practice in Ndirande. However, the antenatal care that adolescents receive at Ndirande Health Center seems to be inadequate and may not meet their needs. Innovative models of care should be employed, embracing the principles of youth friendly services. We recommend the inclusion of early initiation of antenatal care in the sexual reproductive health for young populations. Additionally, pregnant adolescents should be further classified dependent on their marital status because the needs and demands may be different. We also propose

having leaflets that adolescents may read individually.

## Limitations of the study

The researchers, being insiders who practiced with students at the clinic and had experienced the care provided to the pregnant adolescents, had to be neutral to avoid bias which at times was difficult to achieve. However, probing was conducted during interviews to gain deeper understandings of their perceptions.

Although the study has added information to the body of knowledge on pregnant adolescent health, the study focused on adolescents from urban setting thereby leaving the research team ignorant about the perceptions of adolescents from the rural communities.

The team accepts late publication as a limitation as there could be other studies which might have been conducted on the same issue recently. However, we will use these results as a building block for future studies.

## Authors' contributions

Recruited participants and Conducted interviews: MCC and UKK

Managed study data and conducted analysis: RCN, MCC and UKK

Organized the manuscript: LNM and RSM

All authors contributed to the refinement of the final manuscript.

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