SJ General Medicine Africa
Vol.2 No.6 (2024): June 2025 Issue
https://doi.org/10.51168/mztwhk77
Original Article

Factors Influencing Low Utilization of Antenatal Care Services in First Trimester Among Pregnant Women Aged 18-45 Years at Kajjansi Health Centre IV, Wakiso District. A cross-sectional.

Rachiel Athieng Malual, Sharifah Nabukenya.*
Kampala School of Health Sciences.

Abstract.

Background:

Early utilization of antenatal care (ANC) services during the first trimester is crucial for improving maternal and fetal health outcomes. This study investigated individual, community, and health facility–related factors influencing low utilization of first-trimester ANC services among pregnant women aged 18–45 years.

Methodology:

A descriptive cross-sectional study design was employed, involving a sample of 50 pregnant women aged 18–45 years attending a health facility. Data were collected using structured questionnaires. Data were analyzed using descriptive statistics, and results were presented in tables and figures as frequencies and percentages.

Results:

The majority of respondents (54%) were aged 28–32 years, 52% had secondary education, and 76% were married. Most (54%) recognized their pregnancies after missing two consecutive menstrual cycles. Half of the respondents had two living children, and 52% had not planned their pregnancies. More than half (58%) believed ANC should start after two months of pregnancy, and 44% cited booking for childbirth as the main reason for attending ANC. Most respondents (74%) initiated ANC between 4 and 6 months of gestation. Community factors revealed limited social support, with 52% of respondents reporting no encouragement from their husbands or family members. Health facility factors included long waiting times, where 50% spent over 60 minutes accessing services, and fair provider attitudes reported by 56% of respondents.

Conclusion:

Despite high awareness of ANC services, utilization during the first trimester remains low. Delayed pregnancy recognition, unplanned pregnancies, limited social support, misconceptions about the appropriate timing of ANC initiation, and health facility barriers such as long waiting times contribute to late ANC attendance.

Recommendations:

There is a need to strengthen community sensitization on the importance of first-trimester ANC, promote male partner involvement, enhance pregnancy planning education, and improve health facility efficiency to encourage timely utilization of ANC services.

Keywords: *Antenatal care utilization, First-trimester ANC, Pregnant women, Kajjansi Health Centre IV, Wakiso District*
Submitted: *May 14, 2024* ***Accepted:*** *November 22, 2024* ***Published:*** *June 01, 2025*

Corresponding Author: *Rachiel Athieng Malual,*
Email: athiengmalua25@gmail.com
Kampala School of Health Sciences.

Background.

Globally, while 87 per cent of pregnant women access antenatal care with skilled personnel at least once, only 3 in five (59%) receive at least four antenatal visits. However, in sub-Saharan Africa and South Asia, fewer women receive at least 4 antenatal visits (52% and 46% respectively) (UNICEF, 2021). Systematic analysis from 1990- 2013 that was done by Ann et al (2017), revealed that overall coverage of early antenatal care visits in developing regions in the 1990s was 48·1% compared with 84·8% (81·6–87·7) in developed regions. The regional coverage of early antenatal care visits in 2013 ranged from 18·6% in Oceania to 96·5% (95·5–97·3) in Eastern Asia. The regions with the lowest early antenatal care visit coverage in 2013 were Oceania, followed by sub-Saharan Africa. In Nigeria, about 25 % of the women had no ANC contact, 58 % had at least 4 contacts, while only 20 % had 8 or more ANC contacts. The highest rate of 8 or more ANC contacts was in Osun (80.2 %), Lagos (76.8 %), and Imo (72.0 %), while the lowest rates were in Kebbi (0.2 %), Zamfara (1.1 %), and Yobe (1.3 %) (Adeniyi et al., 2021).

The Ethiopian Min Demographic and Health Survey 2019 showed that four in 10 women (43%) had timely ANC visits for their recent live births. Antenatal care coverage has increased in Ethiopia, from 28% in 2005 to 74% during 2019 (Institute EPH & ICF, 2020). In East African Countries from 2010 to 2018, using the last Demographic and Health Surveys dataset of each country. The pooled magnitude of ANC utilization in East African Countries was 56.37%, with the highest optimal ANC utilization in Zimbabwe

(80.96%) and the lowest optimal ANC utilization in Rwanda (44.31%) (Raru et al., 2022).

Even though early antenatal booking provides early detection, management, and prevention of problems that may occur during pregnancy, the prevalence of early antenatal initiation in Tanzania is extremely low (22.9%), and only 16% book early (Tanzania National Bureau of Statistics, 2017). Between 1991 and 2011, the average annual number of births occurring in Uganda increased from 950,000 to nearly 1.5 million. However, the proportion of births receiving recommended ANC stagnated below 50% during the entire period under consideration; further analysis of the timing of ANC showed that in 2011, only 33.1% of women with recommended ANC initiated ANC in the first trimester of pregnancy. However, a 2016 survey indicated that the ANC attendance rate was at 97.3% for one visit but dropped to 59.9% for timely visits (Lenka et al., 2018). This study investigated individual, community, and health facility–related factors influencing low utilization of first-trimester ANC services among pregnant women aged 18–45 years.

Methodology.

Study design.

The study employed a descriptive cross-sectional study design that was quantitative in nature. This design was selected because it is excellent for the measurement of characteristics of large populations.

Study area.

Kajjansi Health Centre IV is located at Kajjansi, Uganda, in the central region, Wakiso district, approximately 6.5 km from Kampala. The facility has several departments such as outpatient, inpatient, pediatric, major and minor surgery, laboratory, pharmacy, ART, and maternity. The facility receives an average of 200 patients daily.

Study population.

The study population consisted of pregnant women aged 18-45 years seeking antenatal care services in Kajjansi Health Centre IV, Wakiso district.

Sample size determination.

The sample size was determined using the formula by Leslie and Kish (1988). N = ^ *d*

Whereby;

N = sample size needed

Z = standard deviation 1.96

P = Rate of occurrence of challenges faced by pregnant mothers, assumed to be 50% because it is unknown.

Q = 1 – P

d = Acceptable error 10% Therefore: **N=** 1.962X 0.5 X 0.5

0.12

N = 96

The sample size is meant to be 94, but due to time constraints, 50 respondents were used.

Study variables

Dependent variable.

The dependent variable was antenatal care attendance.

Independent variable.

Independent variables were individual, community-related, and health facility-related, influencing low utilization of antenatal care services in the first trimester among pregnant women aged 18-45 years.

Inclusion criteria.

This study was composed of pregnant women who were present during the time of data collection and ready to consent.

Exclusion criteria.

This study mainly excluded pregnant women who were present during the time of data collection but not ready to consent, and those who were critically ill.

Sampling technique.

Purposive sampling was used as an ideal method to ensure that participants with diverse perspectives and backgrounds are interviewed to enrich the emerging conceptualization. This data collection tool was preferred because it was easy for the researcher to tap the pregnant women attending ANC on different dates and at different times of the day.

Data collection tools.

The study used semi-structured questionnaires. Questionnaires were designed based on the specific objectives of the study and later translated into the local language (Luganda) by the researcher and her assistant during the interviews. The reason why the questionnaires were translated was that the study was conducted among the literate and illiterate respondents; therefore, it was necessary to interpret question by question to obtain quality information.

Data collection procedure.

An introductory letter from Kampala school of health sciences was taken to the health Centre administration seeking permission to carry for permission to carry out the study. Two research assistants were trained on the subject in question and the data collection procedures they used; before the collection of data, all ethical and cultural issues were considered, such as freedom from harm and respect for human dignity. The researcher and her assistants introduced themselves and explained the purpose of the study to the respondents. The questions were translated into the respondent's local language (Luganda), and each respondent was interviewed from a quiet and private place, preferably for a period of 20-25 minutes. The procedure was repeated each day until the sample size of 50 respondents was obtained.

Piloting the study.

The study area was pre-visited for mobilization a day before data collection commenced. The questionnaire was pre-tested among 15 respondents at Ndejje Health Centre IV, Wakiso district, for clarity, acceptability, and assessed accordingly with an aim of checking whether it met the stated objectives of the study before carrying out the main study, and necessary adjustments were made. Therefore, this was done to produce valid and reliable data.

Data analysis and presentation.

Data was analyzed manually; use of tally sheets, presented in frequency distribution tables, bar graphs, and pie charts using Microsoft Excel.

Quality control.

To ensure the transferability of research, the researcher provided the background information to establish the context of the study and a detailed description of the phenomenon to allow comparisons to be made.

In addition to that, access to the data collected was restricted to only those who were involved in the study.

In order to ensure accuracy and validity of the data that was collected, before data collection, two research assistants were recruited and trained for three days on the subject in question and the data collection procedures they used.

Ethical considerations.

Adherence to ethical standards was observed. In a way that a letter of introduction was obtained from the Kampala school of health sciences research committee, introducing the researcher and seeking permission to carry out the study at Kajjansi Health Centre IV. When permission was granted, the study commenced after the objectives of the study were explained to the respondents; participation in the study was strictly voluntary, and pregnant mothers were given informed consent to be interviewed. Furthermore, respondents were made aware of the fact that they may withdraw from the study at any point in time; any information obtained from the respondents was kept confidential.

Results.

Demographic data.

Table 1(a): Shows the distribution of respondents according to demographic data (N=50).

Variables	Frequency (f)	Percentage (%)
Age of respondents		
18-22 years	9	18
23-27 years	7	14
28-32 years	27	54
33-37 years	4	8
38-45 years	3	6
Total	**50**	**100**
Education level		
Never went to school	5	10
Primary	8	16
Secondary	26	52
Tertiary institution / University	11	22
Total	**50**	**100**
Marital status		
Married	38	76
Single	2	4
Widowed	3	6
Separated	7	14
Total	**50**	**100**

Table 1(b): Shows the distribution of respondents according to demographic data (N=50).

Religion		
Catholic	23	46
Protestant	11	22
Muslim	4	8
Others	13	26
Total	**50**	**100**
Tribe		
Muganda	30	60
Musoga	4	8
Munyankole	3	6
Others	14	28
Total	**50**	**100**
Occupation		
Employed	9	18
Un employed	28	56
Self employed	13	26
Total	**50**	**100**
Gestational age		
1-3 months	4	8
4-6 months	32	60
7-9 months	14	28
Total	**50**	**100**

From a sample of 50 participants, most of the respondents (54%) were within the age bracket of 28-34 years, whereas the least (8%) were within the age bracket of 38-45 years.

Findings revealed that more than half of the respondents (52%) had attained a secondary level of education, whereas the least (10%) had never gone to school.

An overview of marital status showed that the majority of the respondents (76%) were married, whereas the minority (4%) were single. Findings also showed that most of the respondents (46%) were catholic by religion, whereas the least (8%) were Muslims by religion.

The study further revealed that the majority of the respondents (60%) were Baganda, whereas the minority (6%) were Banyankole. Study results also revealed that most of the respondents (56%) were unemployed, whereas the least (18%) were employed.

With respect to the number of living children, more than half of the respondents (68%) were within the gestation age of 4-6 months, whereas 10% were within the gestation age of 7-9 months.

Individual Factors Influencing Low Utilization of Antenatal Care Services in First Trimester Among Pregnant Women Aged 18-45 Years.

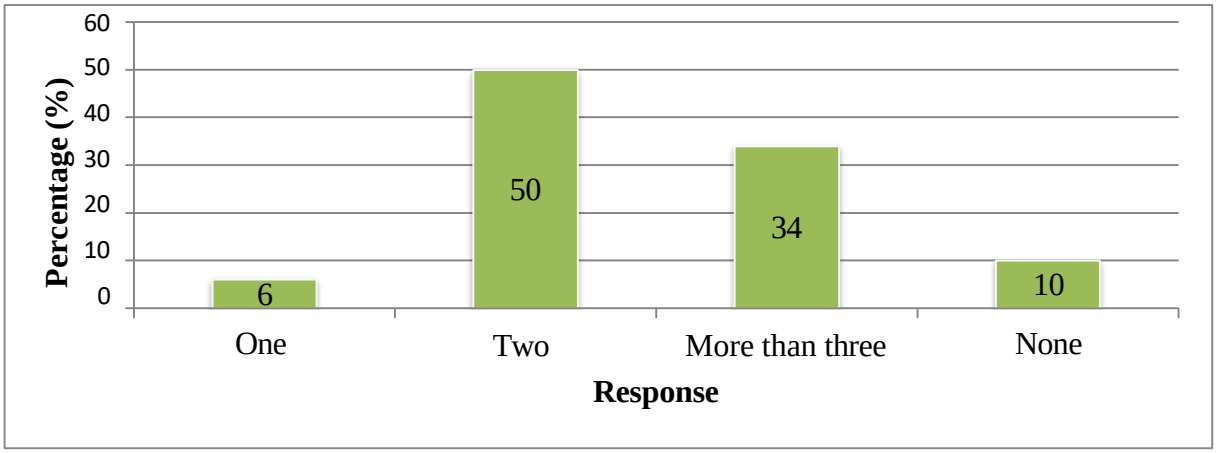
From a narrative perspective, study findings showed that all respondents had ever heard about antenatal care.

Table 2: Shows the distribution of respondents according to when they recognized their current pregnancies (N= 50).

Response	Frequency (%)	Percentage (%)
After a missed menses for one month	15	30
After a missed menses of two months	27	54
After three menses of three months	5	10
I don't recall	3	6
Total	**50**	**100**

From Table 2, more than half of the respondents (54%) recognized current pregnancies after missed menses of two months, whereas the least (6%) didn't recall when they recognized current pregnancies.

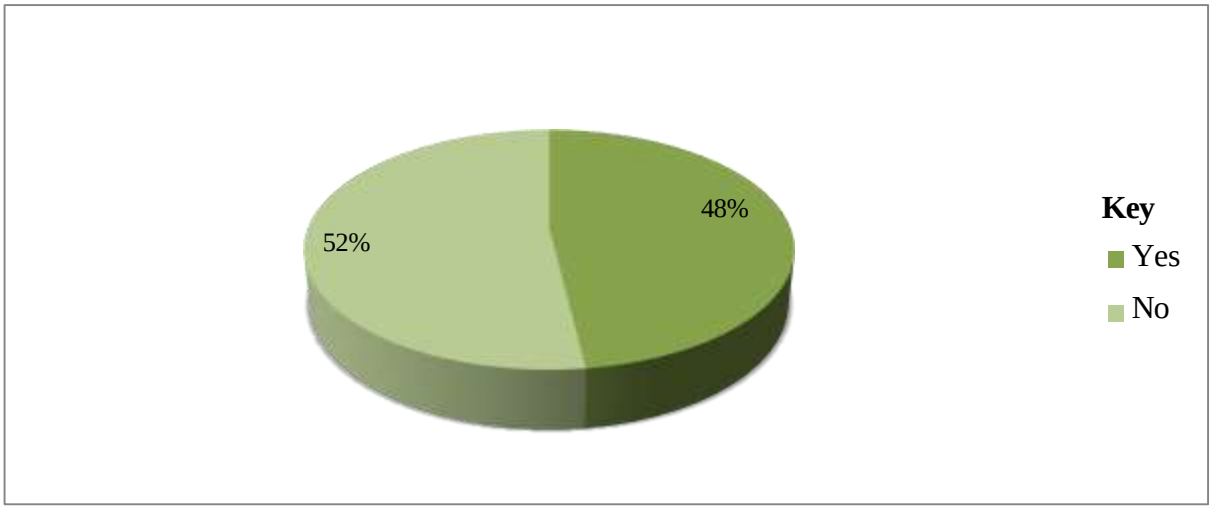
Figure 1: Shows the distribution of respondents according to the number of living children they have (N=50)



From Figure 1 , half of the respondents (50%) had two living children, whereas the least (6%) had one living child.

SJ General Medicine Africa
Vol.2 No.6 (2024): June 2025 Issue
https://doi.org/10.51168/mztwhk77
Original Article

Figure 2: Shows the distribution of respondents according to whether they had planned/ ready for the pregnancy (N=50).



From Figure 2, most of the respondents (52%) had never planned for their pregnancies, whereas the least (48%) had planned for their pregnancies.

Table 3: Shows distribution of respondents according to their views about when a pregnant woman should access antenatal care services (N= 50)

Response	**Frequency (%)**	**Percentage (%)**
Within one month of pregnancy	5	10
Within two months of pregnancy	29	58
After three months of pregnancy	15	30
I don't know	1	2
Total	**50**	**100**

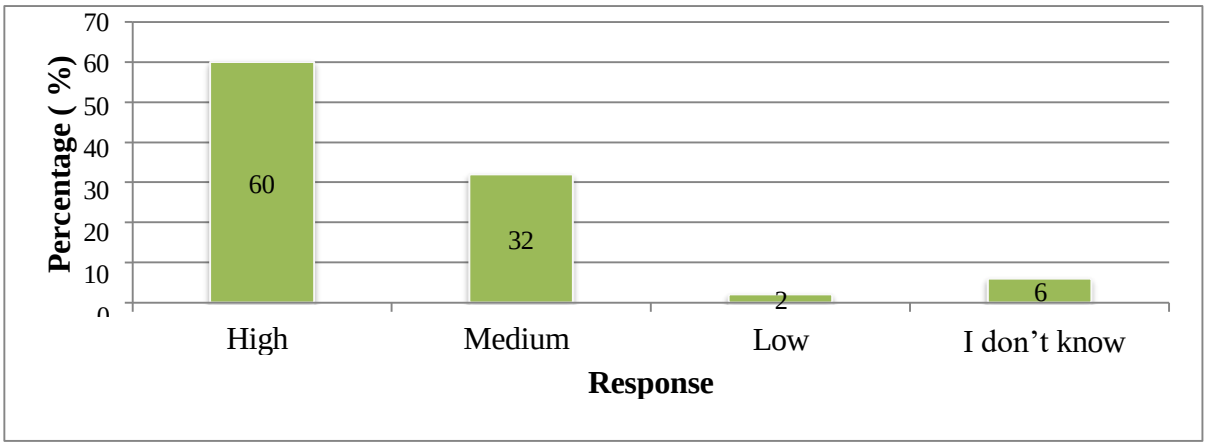
From table 3, more than half of the respondents (58%) reported that a pregnant woman should access antenatal care services after two months of pregnancy, whereas the least (2%) didn't know the period when a pregnant woman should access antenatal care services.

Table 4: Shows the distribution of respondents according to the reasons why pregnant women should go for early antenatal care services (N= 50)

Response	Frequency (%)	Percentage (%)
Booking for the child's birth	22	44
Confirm pregnancy	5	10
Screening and treatment of diseases	13	26
Provision of prevention of mother-to-child transmission of HIV services	3	6
Others	7	14
Total	**50**	**100**

From Table 4, almost half of the respondents (44%) reported booking for childbirth as the reason they go for antenatal care services, whereas the least (6%) reported provision of prevention of mother-to-child transmission of HIV services.

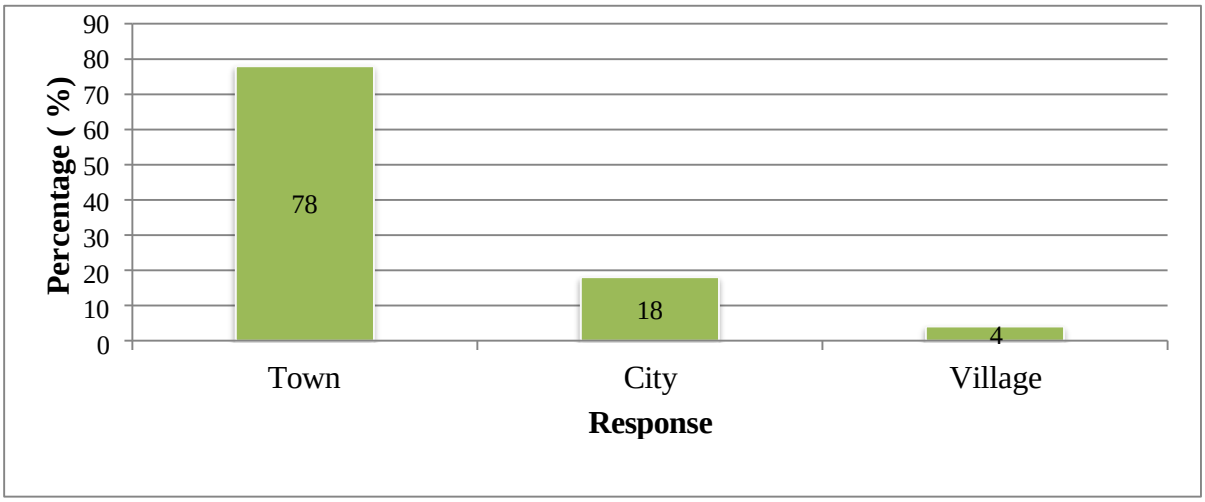
Figure 3: Shows the distribution of respondents according to how they perceived early ANC visits to their health and fetus (N=50)



From the figure 3, majority of the respondents (60%) perceived early ANC visits importance to their health and fetus to be very high whereas the minority (2%) perceived early ANC visits importance to their health and fetus to be very low.

Community Related Factors Influencing Low Utilization of Antenatal Care Services in First Trimester Among Pregnant Women Aged 18-45 Years.

Figure 4: Shows the distribution of respondents according to the location of their homes (N=50)



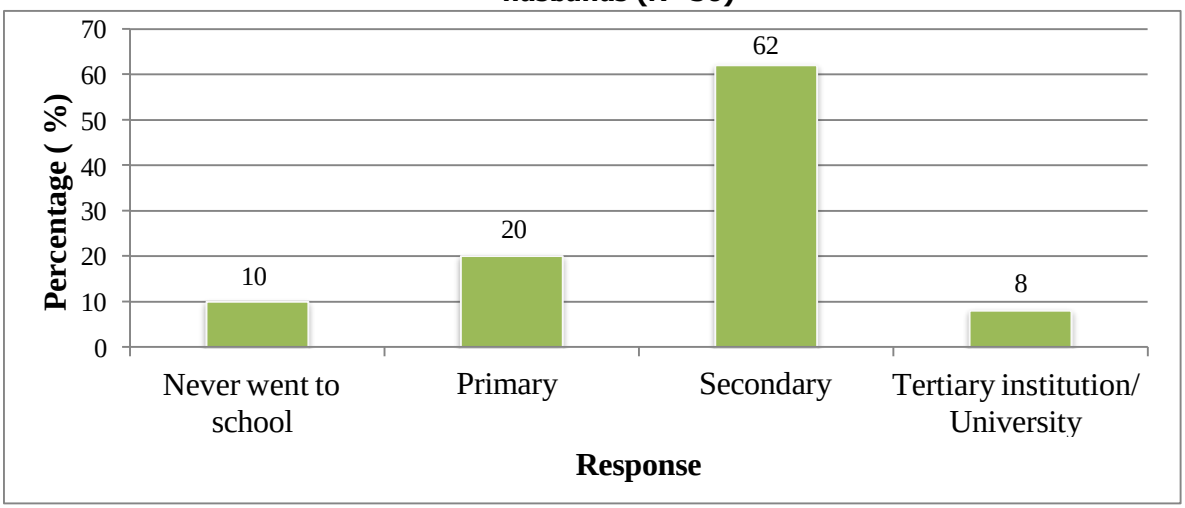
From Figure 4, the majority of the respondents (78%) reported that their homes were located in towns, whereas the minority (4%) their homes were located in villages.

Table 5: Shows the distribution of respondents according to the occupation levels of their husbands (N= 50)

Response	Frequency (%)	Percentage (%)
Employed	5	10
Un employed	16	32
Self employed	29	59
Total	**50**	**100**

From Table 5, most of the respondents (59%) their husbands who were self-employed, whereas the least (26%) were unemployed.

Figure 5: Shows the distribution of respondents according to the education levels of their husbands (N=50)



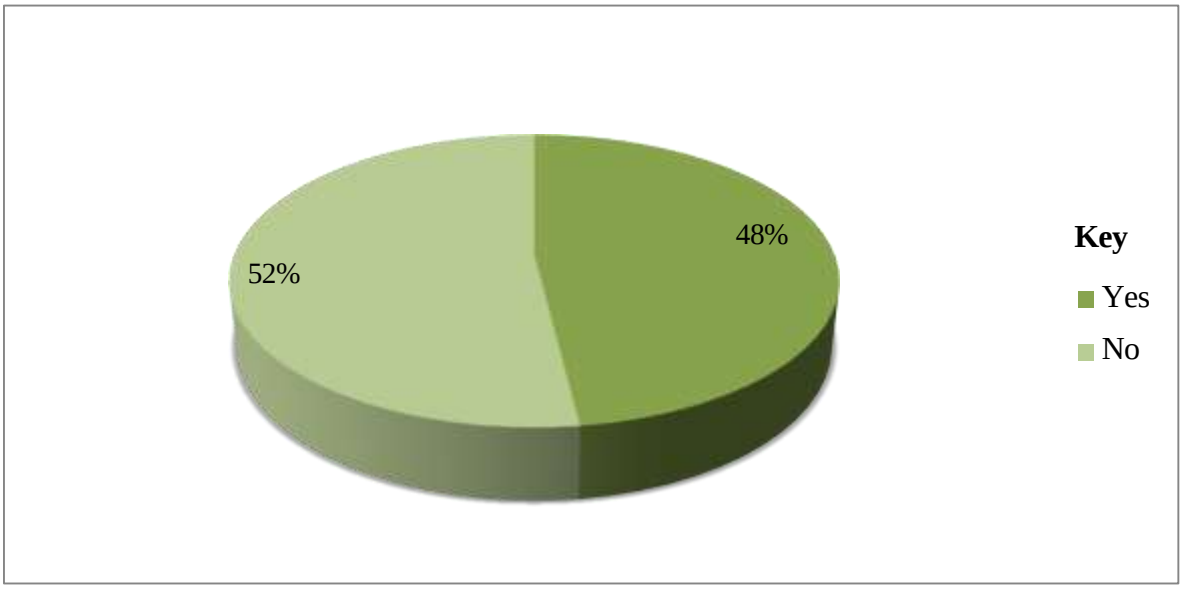
From figure 5, more than half of the respondents (62%) reported that their husbands had attained a secondary level of education, whereas the least (8%) their husbands had attained a Tertiary institution/ University level of education.

Table 6: Shows the distribution of respondents according to who makes the decision towards timely access to ANC (N= 50)

Response	Frequency (%)	Percentage (%)
Husband	3	6
Only me	35	70
Jointly	12	24
Total	**50**	**100**

From table 6, the majority of the respondents (70%) reported that they make their own decisions towards timely access to ANC, whereas the minority (6%) their husbands make decisions towards timely access to ANC.

Figure 6: Shows the distribution of respondents according to whether they had ever received any social support from their husbands/ family members to encourage them to go for timely antenatal care (N= 50).

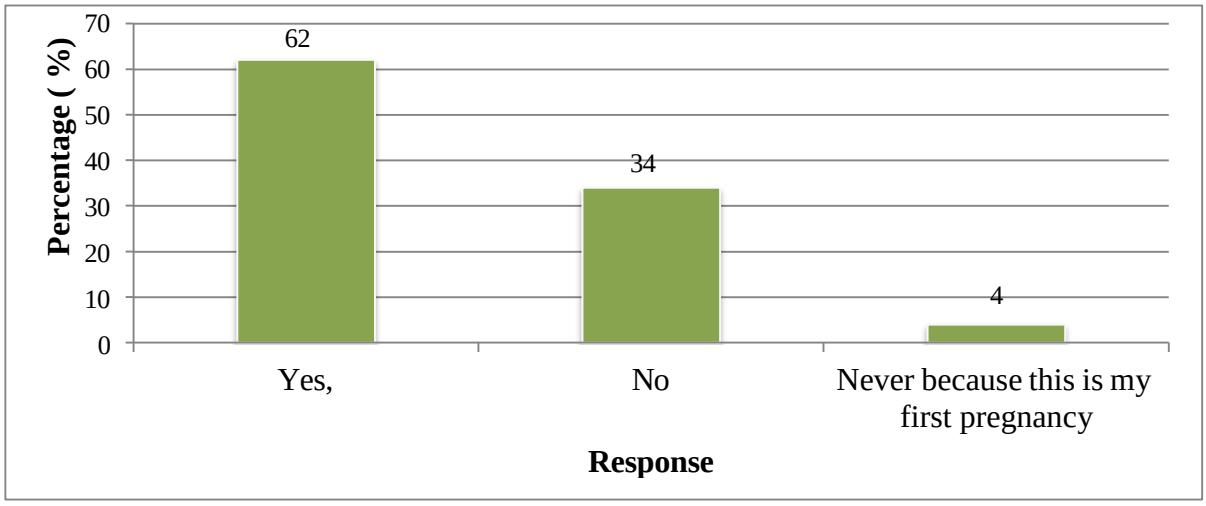


From the figure above, most of the respondents (52%) reported that they had never received any social support from their husbands/ family members to encourage them to go for timely antenatal care, whereas the least (48%) had ever received social support.

Health Facility Related Factors Influencing Low Utilization of Antenatal Care Services in the First Trimester Among Pregnant Women Aged 18-45 Years.

SJ General Medicine Africa
Vol.2 No.6 (2024): June 2025 Issue
https://doi.org/10.51168/mztwhk77
Original Article

Figure 7: Shows the distribution of respondents according to whether they had ever received adequate counseling services from health workers in regards to timely access to ANC services (N=50)



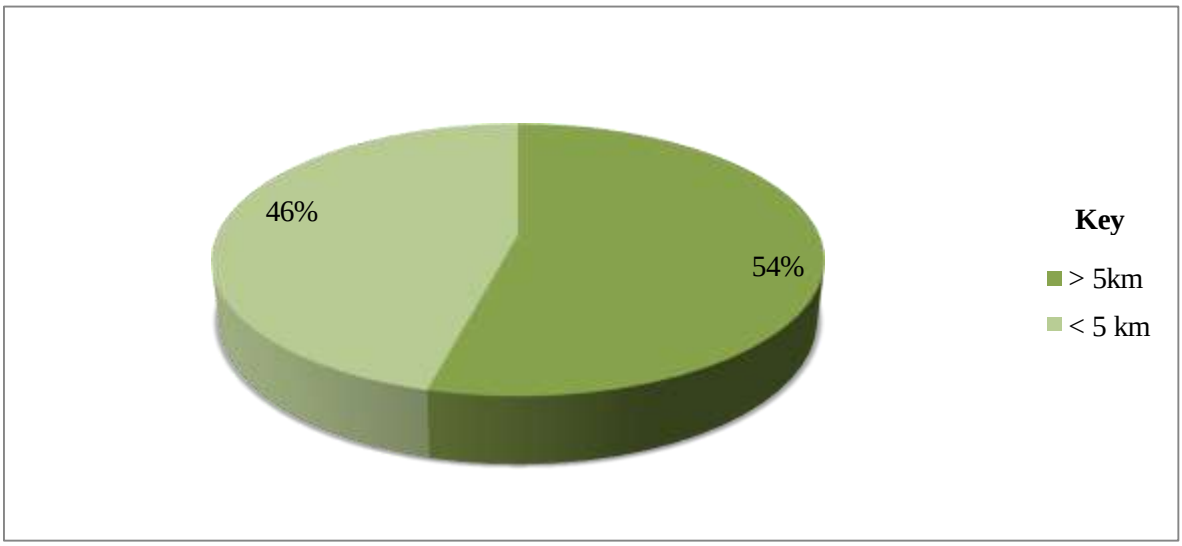
From figure 7, the majority of the respondents (62%) agreed that they had ever received adequate counseling services from health workers in regards to timely access to ANC services, whereas the minority (4%) disagreed because that was their first pregnancy.

Table 7: Shows the distribution of respondents according to when they started to access ANC services at this facility (N= 50).

Response	Frequency (%)	Percentage (%)
1-3 months of pregnancy	11	22
4-6 months of pregnancy	37	74
7-9 months of pregnancy	2	4
Total	**50**	**100**

From table 7, the majority of the respondents (74%) started to access ANC services within 4-6 months of pregnancy, whereas the minority (4%) started to access ANC services within 7-9 months of pregnancy.

Figure 8: Shows the distribution of respondents according to the distance from their homes to the health facility (N= 50)



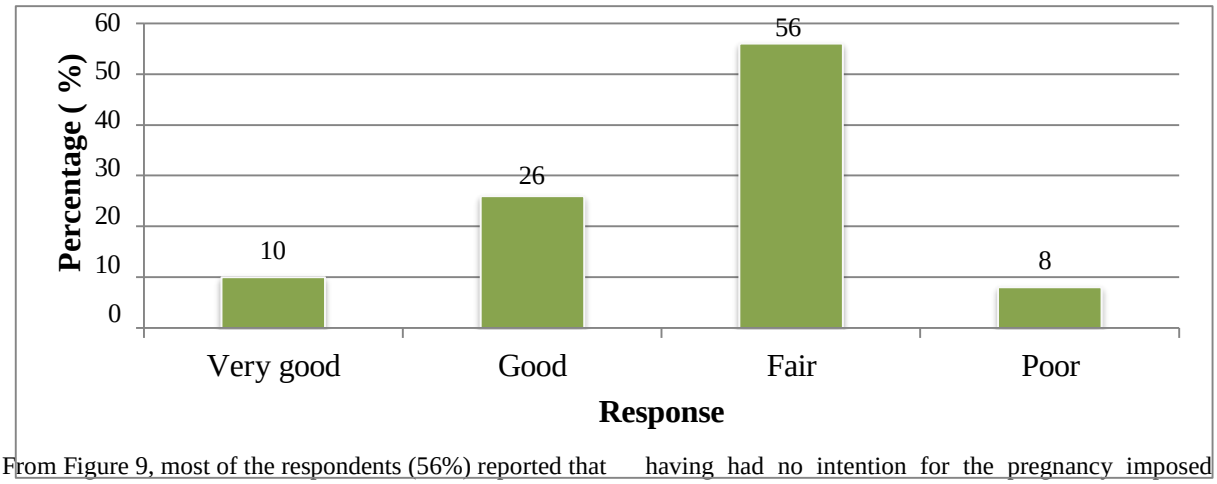
From the figure 8, most of the respondents (54%) had a distance from their homes to the health facility of less <5 km, whereas the least (46%) had a distance of more>5 km.

Table 8: Shows distribution of respondents according to how long it takes to access Antenatal Care Services at this facility (N= 50)

Response	**Frequency (%)**	**Percentage (%)**
20-30 minutes	1	2
40-50 minutes	24	48
Over 60 minutes	25	50
Total	**50**	**100**

From Table 8, half of the respondents (50%) reported that they spend a period of over 60 minutes to access ANC services at this facility, whereas the least (2%) reported that they spend a period of 20-30 minutes to access ANC services at this facility.

Figure 9: Shows the distribution of respondents according to how they rate the attitude of service providers towards pregnant women (N=50)



From Figure 9, most of the respondents (56%) reported that the attitude of service providers towards pregnant women is fair, whereas the least (8%) reported that the attitude of service providers towards pregnant women is poor.

Discussion.

Individual factors influencing low utilization of antenatal care services in the first trimester among pregnant women aged 18-45 years.

Findings from the study showed that all respondents had ever heard about early antenatal care. This signifies that ample numbers of study participants were responsive to the study perspective. This is a consistent indicator survey that was done in Tanzania by Fabiola et al. (2020), where 90% of respondents were aware of early antenatal care attendance. However, more than half of the respondents (54%) recognized current pregnancies after missed menses of two months. This implies that the average number of participants took a long time to know about their current pregnancy status, hence paving the way for delayed early ANC uptake. The study results were in line with Mendy & Sawo (2018), where (60%) of the pregnant women said that they were unaware that they were pregnant, which is why they were booking late.

The study further revealed that half of the respondents (50%) had two children. Therefore, since most of the study participants had ever given birth, the probability of having perceived early antenatal care attendance as vital was minimal since they had ever attended ANC services before. The study results were in line with Aduloju et al (2016), where higher parities (1-4; ≥5) accounted for most late bookings, 81.8% and 100%.

Results also depicted that most of the respondents (52%) had never planned for their pregnancies. This denotes that having had no intention for the pregnancy imposed an impact on early ANC visits during the first trimester. This was consistent with another study that was done by Roelofse (2018), where results revealed that (37, 74.0%) did not plan their current pregnancy. Interestingly, almost half of the respondents (44%) perceived booking for childbirth as the reason why they go for antenatal care services. This strongly confirms they didn't perceive ANC visits during the first trimester. This is in agreement with Ragolane (2017), where (48%) of the pregnant mothers believed that antenatal care should be attended to where the pregnant woman would deliver.

Community-related factors influencing low utilization of antenatal care services in the first trimester among pregnant women aged 18-45 years.

The study discovered that most of the respondents (59%) their husbands were self –employed. However, probably in one or the other, they were not able to foot the related bills at any facility due to the standing capital of their business, hence paving the way to late ANC. The study results were in agreement with Girum (2016), where pregnant women who had low household monthly income were 3.2 times more likely to be booked late for their first ANC booking as compared to their counterparts with high monthly income. To add on that, more than half of the respondents (62%) reported that their husbands had attained a secondary level of education. Therefore, most likely, women with husbands having low levels of education tend to have inadequate knowledge of timely ANC visits, and they end up not providing social support to their spouses. The study results were equivalent to those of Eyasu et al (2017), where results indicated that there was also a high rate of late ANC booking among illiterate husbands (88.8%). Nevertheless, the

majority of the respondents (70%) reported that they make their own decisions towards timely access to ANC. This clearly implies that they had a right to choose when and where to go for ANC, hence paving the way to delayed visits. The study results were comparable with findings that were obtained from South Africa by Ragolane (2017), where (70%) of the participants personally decided for themselves on when and where to go for ANC services. The study also showed that most of the respondents (52%) reported that they had never received any social support from their husbands/ family members to encourage them to go for timely antenatal care. This implies that they never had anyone who could socially motivate them to utilize ANC during the first trimester. Current findings were consistent with a study that was done in Jinja by Mwinda (2018), where the majority of respondents (68.5%) acknowledged that their partners supported them financially and morally during pregnancy.

Health facility-related factors influencing low utilization of antenatal care services in the first trimester among pregnant women aged 18-45 years.

The study showed that the majority of the respondents (62%) agreed that they had ever received adequate counseling services from health workers regarding timely access to ANC services. This clearly signifies that study participants had never perceived early antenatal care services as vital despite having received adequate counseling from health workers. This is in contrast with Iiyambo (2017), where 78 (65%) reported that they never had adequate counseling towards ANC.

Additionally, the majority of the respondents (74%) started accessing ANC services within 4-6 months of pregnancy. This clearly depicts that an outstanding number of mothers utilized ANC services recently. This is also in line with findings that were obtained from Lenka et al (2018), where 59.9% of timely visits dropped. Findings from the study revealed that most of the respondents (54%) had a distance from their homes to the health facility of less than 5 km. Therefore, this implies that women were very close to the facility, but it is anticipated that they were reluctant to utilize ANC in time. The study results differed from Mwinda (2018), where nearly half of the respondents (49%) said that the distance from their homes to Jinja hospital was 6-10 Km. The study discovered that half of the respondents (50%) reported that they spend a period of over 60 minutes accessing. This could be attributed to the fact that Kajjansi health centre IV is a public facility, and the probability of receiving many clients was highly anticipated, hence making some mothers skip first-trimester ANC visits. The study results were in agreement with Ragolane (2017), where (73%) perceived that long waiting time affected the timing of initiating booking ANC for the majority of participants. Results also showed that most of the respondents (56%) reported that the attitude of service providers towards pregnant women was fair. This indicates that client-based friendly perception towards ANC services had to be minimal. Current findings were consistent with Mkateko (2016), where 53% indicated that the reason why they attended antenatal care late was because of the nurses' attitude.

Conclusion.

The study concealed that irregular menses as (54%) recognized current pregnancies after missed menses of two months, most of the mothers had already given birth as (50%) had two living number of children, unplanned pregnancies since (52%) had never planned for their pregnancies and unfamiliarity about vital role for early ANC services as (44%) perceived booking for child birth as the reason as to they go for antenatal care services were the major individual factors influencing low utilization of antenatal care services in first trimester among pregnant women aged 18-45 years.

The study established that husband's levels of employment as (59%) their husbands were self – employed, low levels of education since (62%) reported that their husbands had attained secondary level of education, personal decisions about timely access to ANC as noted by (70%) who made their own decisions towards timely access to ANC and insufficient support from family members as noted by (52%) were the main community related factors influencing low utilization of antenatal care services in first trimester among pregnant women aged 18-45 year**s.**

The study exposed that long waiting time, as reported by (50%), and attitude of the health workers, since (56%) reported that the attitude of service providers towards pregnant women was fair, were the most outstanding health facility-related factors influencing low utilization of antenatal care services in the first trimester among pregnant women aged 18-45 year**s.**

Generally, the researcher discovered that insufficient support from family members, unfamiliarity about vital role for early ANC services, un planned pregnancies, perception of having had been given birth before, irregular menses, long waiting time, attitude of the health workers, husband's low levels of education and occupation were the outstanding factors influencing low utilization of antenatal care services in first trimester among pregnant women.

Recommendations.

The Ministry of Health should develop comprehensive tools to monitor and intensively encourage pregnant women, with their family members, most especially husbands, to utilize timely ANC to reduce maternal-related complications. This

will also enable the District Health Officers to supplement performance assessment results and identify key areas that need capacity development and technical assistance.

Healthcare services should be conveniently placed, distance-wise, with timely access to maternal and child healthcare services by the government of Uganda through the Ministry of Health, since most of the pregnant mothers had to travel long distances and had concerns about long waiting times during ANC visits.

Kajjansi, Health Centre IV administration should continue to carry out community out-reaches focusing on specialized education programs that will intensively enlighten pregnant women and their family members about the impact of social support provision to pregnant mothers and complications that would result from late or non-timely access to ANC visits.

Acknowledgement.

I thank the almighty God who has been my anchor and my strength in this journey, in everything I have done; He has seen me through.

Special gratitude goes to my supervisor, Ms. Nabukenya Sharifah, for her dedication, moral support, and guidance throughout the study. I have learnt more in life than just academics from her.

I am most grateful to my family: beloved mum Daruka Akech Aleu, beloved husband Mayen Aguer Mayen, beloved mother-in-law Rebecca Aluel Ajang, beloved Uncle Mathiang Kuir Aleu, my best friend Marry Akuol Mawut, and my beloved children Magret Achol Mayen, Abraham Aguer Mayen, and Rebecca Aluel Mayen for their honorable support and prayers through my study period. Thank you for your patience, love, and encouragement. I thank my classmates, especially Namurondo Spaceoza, Nakyongo Esther, Dembe Mark, and Ayeko Prossy Mwanga, with whom we walked this path together; they are such a great team.

List of Abbreviations.

ANC: Antenatal Care
HMIS: Health Management Information System
ICF: International Classification of Functioning
MoH: Ministry of Health
SDG: Selective Development Goal
UBOS: Uganda Bureau of Statistics
UDH: Uganda Demographic and Health Survey
UNICEF: United Nations Children's Fund
WHO: World Health Organization

Source of funding.

The study was not funded.

Conflict of interest.

There is no conflict of interest.

Availability of data.

Data used in this study are available upon request from the corresponding author.

The author's contribution.

RAM designed the study, conducted data collection, cleaned and analyzed data, drafted the manuscript, and SN supervised all stages of the study from conceptualization of the topic to manuscript writing and submission.

Author's biography.

Rachiel Athieng Malual is a student of a diploma in Clinical Medicine and Community Health at Kampala School of Health Sciences.

Sharifah Nabukenya is a research supervisor at Kampala School of Health Sciences.

References.

1. Aduloju, O. P., Akintayo, A. A., Aduloju, T., & Akin-Akintayo, O. O. (2016). Gestational age at first antenatal care booking and its associated factors in a tertiary health facility in South-West Nigeria. *Journal of Obstetrics and Gynaecology*, 36(6), 709–713.
2. Eyasu, A. M., Gebreyesus, S. H., & Kebede, Y. (2017). Determinants of late initiation of antenatal care among pregnant women in Ethiopia. *International Journal of Public Health Science*, 6(2), 156–163.
3. Fabiola, M., Kazaura, M., & Ezekiel, M. (2020). Awareness and timing of antenatal care attendance among pregnant women in Tanzania. *BMC Pregnancy and Childbirth*, 20, 314.
4. Girum, T. (2016). Assessment of factors associated with late initiation of antenatal care among pregnant women in Ethiopia. *Journal of Public Health and Epidemiology*, 8(8), 155–162.
5. Iiyambo, L. (2017). Factors influencing utilization of antenatal care services among pregnant women in Namibia. *African Journal of Reproductive Health*, 21(4), 84–92.
6. Lenka, S. R., Choudhary, T. S., & Singh, S. (2018). Trends and determinants of antenatal care utilization in low- and middle-income countries. *Journal of Family Medicine and Primary Care*, 7(2), 263–269.
7. Mendy, M., & Sawo, B. (2018). Determinants of late antenatal care booking among pregnant women in The Gambia. *African Health Sciences*, 18(3), 556–564.

8. Mkateko, T. A. (2016). Perceived quality of antenatal care services and their influence on timing of booking among pregnant women in South Africa. *Curationis*, 39(1), 1–7.
9. Mwinda, R. (2018). Factors influencing late initiation of antenatal care among pregnant women attending Jinja Regional Referral Hospital, Uganda. *Makerere University Institutional Repository*.
10. Ragolane, M. (2017). Factors associated with late booking for antenatal care among pregnant women in South Africa. *African Journal of Primary Health Care & Family Medicine*, 9(1), 1–8.
11. Roelofse, J. (2018). Unplanned pregnancy and its influence on antenatal care utilization among women of reproductive age. *South African Journal of Obstetrics and Gynaecology*, 24(2), 45–50.
12. Adeniyi, O. V., Ajayi, A. I., Goon, D. T., Owolabi, E. O., Eboh, A., Lambert, J., & Ter Goon, D. (2021). Factors affecting the use of antenatal care services in Nigeria: Evidence from a nationally representative survey. *BMC Pregnancy and Childbirth*, 21, 1–12.
13. Ann, B., Hogan, D. R., Hosseinpoor, A. R., & Boerma, T. (2017). Monitoring universal health coverage: A systematic analysis of antenatal care coverage from 1990 to 2013. *The Lancet Global Health*, 5(3), e366–e375.
14. Institute of Public Health (EPH), & ICF. (2020). *Ethiopia Mini Demographic and Health Survey 2019: Key Indicators*. Addis Ababa, Ethiopia, and Rockville, Maryland, USA: EPH and ICF.
15. Lenka, S. R., Choudhary, T. S., & Singh, S. (2018). Trends and determinants of antenatal care utilization in low- and middle-income countries. *Journal of Family Medicine and Primary Care*, 7(2), 263–269.
16. Raru, T. B., Ayana, G. M., & Bayu, H. (2022). Optimal antenatal care utilization and its associated factors in East African countries: A pooled analysis of Demographic and Health Surveys. *BMC Pregnancy and Childbirth*, 22, 1–12.
17. Tanzania National Bureau of Statistics (NBS). (2017). *Tanzania Demographic and Health Survey and Malaria Indicator Survey 2015–16*. Dar es Salaam, Tanzania, and Rockville, Maryland, USA: NBS and ICF.
18. UNICEF. (2021). *Antenatal care*. New York: United Nations Children's Fund.
19. Uganda Bureau of Statistics (UBOS), & ICF. (2017). *Uganda Demographic and Health Survey 2016*. Kampala, Uganda, and Rockville, Maryland, USA: UBOS and ICF.

SJ General Medicine Africa
Vol.2 No.6 (2024): June 2025 Issue
https://doi.org/10.51168/mztwhk77
Original Article

PUBLISHER DETAILS

SJC PUBLISHERS COMPANY LIMITED

Catergory: Non Government & Non profit Organisation
Contact: +256 775 434 261 (WhatsApp)
Email:info@sjpublisher.org or studentsjournal2020@gmail.com
Website: https://sjpublisher.org
Location: Scholar's Summit Nakigalala, P. O. Box 701432,Entebbe Uganda, East Africa