

KNOWLEDGE AND PRACTICES TOWARDS ANTENATAL CARE SERVICES AMONG PREGNANT WOMEN ATTENDING TORORO GENERAL HOSPITAL, TORORO DISTRICT.

Patick Adawa, Sania Nakasolo
Kampala School of Health Sciences

Abstract

Background:

ANC is a critical component of maternal health services, aimed at ensuring the health and well-being of both the mother and the fetus during pregnancy. The study aimed to assess the Knowledge and practices towards antenatal care services among pregnant women attending Tororo General Hospital, Tororo District.

Methodology:

A descriptive cross-sectional study, with a sample size of 50 respondents, employed quantitative methods. The study employed probability sampling, specifically a simple random sampling technique.

Results:

(52%) Of the women had attended up to secondary school level, 34% had up to primary level, and 2% had tertiary level. (76%) resided in rural areas while (24%) resided in urban areas. (84%) have ever heard about ANC, only 16% reported to have not heard. (58%) admitted that ANC attendance should be started in the 1st trimester, (38%) acknowledged the 2nd trimester, and only 4% said whenever necessary. (52%) got information about ANC from health workers, least 16% reported that they got the information from other sources, including Traditional Birth Attendants. (60%) attended ANC 3-4 times, only (2%) had > 7 visits. (80%) always followed the advice and recommendations provided to them, only 1% often followed. 70% took their supplements daily, and 30% occasionally took their supplements. 96% had received the recommended vaccines while only 4% had not received

Conclusion:

The knowledge among the pregnant women was good, with very good practices during ANC visits.

Recommendation:

The MOH should construct more facilities in the rural areas to minimize poor practices like failure to attend ANC visits being brought about by the long distances of their places of residence from the health facility.

Keywords: Knowledge, Practices, Antenatal care services, Tororo General Hospital

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Corresponding Author: Patick Adawa

Email: adawapatricks0@gmail.com

Kampala School of Health Sciences

Background of the study

Antenatal care (ANC) is a critical component of maternal health services, aimed at ensuring the health and well-being of both the mother and the fetus during pregnancy. Comprehensive ANC can significantly reduce maternal and neonatal morbidity and mortality by facilitating early detection and management of pregnancy-related complications (WHO, 2018). Despite global advancements in maternal healthcare, disparities in ANC utilization and quality persist, particularly in low-resource settings (UNICEF, 2020). According to the WHO, approximately 810 people die every day due to complications during pregnancy and childbirth (WHO, 2021). According to the 2011 Census, India's maternal mortality rate accounts for a staggering 212 per 100,000 live births. Hemorrhage, obstructed labor, asthma, and other disorders are common causes (Ahirwa N, 2018). India showed that the knowledge of the participants about antenatal care services, and danger signs of pregnancy was 80%. The participants also knew pregnancy danger

signs. Nearly 92% were aware of bleeding per vagina being a danger sign, 85% stated

weak or no movement of the baby as a danger sign, 75% knew that pain in the abdomen was a danger, 68% knew excessive vomiting as a danger sign while a mere 41% reported that convulsions were a danger sign. They further reported that ANC helped them to understand these signs (Nimmy N. John et al, 2020). Studies from Uganda and Tanzania revealed that long distances to health facilities and lack of transportation were major barriers to ANC attendance (Nankumbi et al, 2019); this study showed that 58% of women reported that long distances to health facilities were a major barrier to access ANC services, 45% of the respondents cited financial constraints as reason for not attending ANC visits and 32% of them mentioned lack of transportation as a significant factor affecting their ability to seek ANC services (Mbuya et al, 2018). Cultural practices also play a role; in some communities, women prefer traditional birth attendants, leading to delays or avoidance of formal

ANC services (Adu et al., 2020). Improving access to healthcare services and addressing cultural practices are crucial in promoting ANC attendance.

Hence, ANC plays a significant role in public health to prevent maternal and neonatal morbidity and mortality in the world. It aims to avoid congenital disabilities, preterm labor, neural tube defects, anemia, and poor maternal health by providing routine check-ups and planning the appropriate nutritious diet, appropriate treatment for pregnancy-related complications, and fluid intake for pregnant women (Zäidi et al, 2018). Globally 62% of pregnant women received WHO recommended minimum 4 visits for pregnant women in 2010–2016. One of the most critical components of India's family welfare program has been the promotion of maternal and child health (WHO, 2021). It is necessary to promote safe motherhood by providing excellent ANC to reduce maternal and child mortality rates. According to the National Family Health Survey, the Full ANC is defined as at least 3 visits for ANC testing, at least 1 Tetanus toxoid (TT) injection received, and 100/tablets/of iron and folic acid (IFA), (Bashir et al, 2023). The study aimed to assess the Knowledge and practices towards antenatal care services among pregnant women attending Tororo General Hospital, Tororo district.

Methodology

Study Design

A descriptive cross-sectional study was used to employ quantitative methods of data collection because it gave a general picture of the study and also data collection took place within the shortest period of time.

Study Area

This study was carried out in Tororo general hospital in ANC-clinic being the fact that it was a suitable accessible focal point where the researcher accessed pregnant women who attended antenatal care services that day.

Study population

The study population was all pregnant women who attended the ANC clinic that day and were willing to take part in the study.

Sample Size determination

Sample size was calculated using QR/T (Burton, 1965) Where;

Q=Total number of days spent in data collection

R= Maximum time taken by the interviewer per day

T= Maximum time taken by the interviewer

Therefore;

R= 5 hours

Q= 5days

T= ½ hours

QR/T= (5x5)/1/2

25/1/2= 50 respondents

Therefore, the sample size for this study was **50 respondents**.

Sampling Technique

This study employed probability sampling specifically simple random sampling technique to select respondents. This sampling technique was preferred because the researcher was able to select a sample size that has an unbiased representation of the population since all respondents had equal chances and less time consuming.

Data Collection Method

The questionnaire was used in this study since many respondents were gotten at the same time and provides anonymity to respondents which puts them at ease and encouraged them to answer truthfully.

Data Collection Tool

This study used a semi-structured questionnaire with both open-ended and closed-ended questions developed on the basis of literature review. It contained section 1 (demographic data) with 11 questions, section 2(knowledge towards antenatal care services) with 6 questions, and section 4(practices towards antenatal care) having 4 questions.

Data Collection Procedure

Women's knowledge towards antenatal care services was assessed using well-structured questions, explained to them until they confirmed that they had understood. Data was collected using a well-structured questionnaire that was completed by face-to-face interviews with the respondents. Data included information regarding participants' demographics, knowledge and practices towards of antenatal care services.

Study Variables

This research aimed at determining the knowledge and practices towards antenatal care services among pregnant women attending Tororo general hospital in Tororo district where the independent variable was Knowledge and Practices and the dependent variable was antenatal care services among the pregnant women attending Tororo general hospital in Tororo district.

Quality Control

To ensure collection of quality data, the questionnaire was pre-tested on 10 pregnant women eligible at Malaba Heath Centre IV to test the validity and reliability of the questions and time needed to conduct an interview with each mother, after piloting, the captured information was modified to improve clarity before undertaking the study. Time required for the study was determined in the pilot study and ample time was given for data collection. All pregnant women who attended ANC on the day of study, were in good health conditions, were willing to take part in and had consented to take part in the study

were included in the study while those in critical medical condition, didn't attended ANC on the day of study and unwilling to take part in the study were excluded from the study.

Data Analysis and Presentation

Data from the questionnaire were first managed and then analysis was done through tallying, coding, and editing. Raw data was cleaned and entered into the computer using Microsoft excel for frequency distribution tables and charts. Data analysis was also be based on the response to the questions. Results were presented using frequency distribution tables, bar graphs and pie charts.

Ethical considerations

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 with assurance of confidentiality. The study was commenced after receiving a permission letter from the administration of Tororo general referral hospital. This is further followed by explaining the objectives of the study and ensuring consent had been made by participant to take part in the study. Any information obtained from the respondents was kept confidential and questionnaires stored in a lockable case.

Results

Demographic data

Table 1: shows the demographic data (N=50)

1.AGE		
Age (Years)	Frequency (f)	%
15-19	9	18
20-24	15	30
25-29	15	30
30-34	4	8
35-39	6	12
40-44	1	2
TOTAL	50	100
2.EDUCATION LEVEL		
Primary school	17	34
Secondary school	26	52
Tertiary level	7	14
TOTAL	50	100
3.MARITAL STATUS		
Married	44	88
Single	6	12
TOTAL	50	100
4.INCOME LEVEL		
Low	39	78
Middle	11	22
TOTAL	50	100

5.RESIDENCE		
Rural	37	74
Urban	13	26
TOTAL	50	100
6.RELIGION		
Protestants	18	36
Born again	15	30
Catholic	9	18
Muslim	7	14
SDA	1	2
TOTAL	50	100
7.GRAVIDITY		
Prime gravid	14	28
Multigravida	36	72
TOTAL	50	100
8.PARITY		
Nulliparous	14	28
Multiparous	36	72
TOTAL	50	100
9.DISTANCE (KM)		
0.1-0.5	21	42
0.5-1.0	14	28
1.1-1.5	3	6
1.6-2	8	16
>2	4	8
TOTAL	50	100

Table 1 shows that 30% of the pregnant women were in the adolescent stage (15-19), 30% were in their 20-24 years of age, 12% were in the age range of 35-39, 8% in the range of 30-34 years and 2% were in the age range of 40-44. Most (52%) of the women had attended up to secondary school level, 34% had at least attended up to primary level while only (2%) had studied up to tertiary level. The majority (88%) of the respondents were married while the minority (12%) was living a single life. (78%) of the pregnant women were low-income earners while the minority (22%) were middle-income earners. (76%) of the women who took part in the study resided in the rural areas while a minority (24%) of them were

residents of the urban area. Most (36%) of the respondents were protestants, 30% were Born Again, 18% were Catholics, 14% were Muslims and only 2% were Seventh Day Adventists (SDA). (72%) of the women who participated in the study were multiparous while the minor population (28%) was nulliparous. This is true for the gravidity as well where 72% were multi-gravid mothers while 28% were prime gravid women. 42% of the respondents lived within 0.1-0.5 km far from the health facility, 28% lived 0.5-1.0 km far away from the health facility, 6% lived within 1.1-1.5 km range from the health facility, 16% lived within 1.6-2.0 km and 8% lived beyond 2km from the hospital.

Knowledge towards antenatal care services among pregnant women attending Tororo General Hospital, Tororo district

Table 2: shows the distribution of mothers in terms of whether they have ever heard about ANC, number of ANC visits recommended and the trimester with which to start the first antenatal care (N=50)

EVER HEARD ABOUT ANC	Frequency(f)	%
Yes	42	84
No	8	16
TOTAL	50	100
NUMBER OF ANC VISITS RECOMMENDED		
4	11	22
6	16	32
8	7	14
Others	16	32
TOTAL	50	100
TRIMESTER TO START ANC		
First trimester	29	58
Second trimester	19	38
Third trimester	0	0
Others	2	4
TOTAL	50	100
SOURCE OF KNOWLEDGE		
Health workers	26	52
TBAs	8	16
Social media channels	16	32
TOTAL	50	100

Table 2, shows the majority (84%) of the women who took part in the study had ever heard about ANC whereas the minority (16%) reported not having heard about ANC. 32% of the respondents reported 6 times recommendations by WHO, and the same percentage (32%) reported that they may attend as many times as possible depending on their health status. 22% reported that 4 times are recommended and 14% admitted that 8 times visit is recommended by WHO. (58%) of the women who admitted that ANC attendance should be started in the 1st trimester, the least (38%) reported that it should be in the 2nd trimester and only 4% of the total respondents reported that it should be whenever necessary. (52%) of the respondents who got information about antenatal care from health workers, the least (32%) reported that this information was from social media platforms and only 16% reported that they got the information from other sources including Traditional Birth Attendants.

Practices towards antenatal care services among pregnant women attending Tororo General Hospital, Tororo District

Table 3: shows the distribution of the respondents according to the number of attendance they had made (N=50)

Number Of ANC attended	Frequency	%
0	0	0
1-2 visits	9	18
3-4 visits	30	60
5-6 visits	10	20
>7 visits	1	2
Total	50	100

Table 3, findings show that the majority (60%) of the respondents reported having attended ANC 3-4 times, 20% had made 5-6 visits, 18% had 1-2 visits and only (2%) had >7 visits.

Table 4: shows distribution of respondents according to how they follow the recommendations and whether they received vaccines as well as taking supplements (N=50)

FOLLOWING RECOMMENDATIONS	frequency(f)	%
always	40	80
Often	1	2
Sometimes	9	18
Rarely	0	0
Never	0	0
TOTAL	50	100
RECEIVED VACCINES		

Yes	48	96
No	2	4
TOTAL	50	100
TAKING SUPPLEMENTS		
Daily	35	70
Weekly	0	0
Occasionally	15	30
Rarely	0	0
Never	0	0
TOTAL	50	100

Table 4, findings revealed that the majority (80%) of the respondents always followed the advice and recommendations provided to them 18% of them reported that they sometimes followed the recommendations and only 1% followed often. 70% of

the respondents took their supplements daily and the minority (30%) occasionally took their supplements. 96% of the population reported that had received the recommended vaccines while only 4% had not yet received all the recommended vaccines

Discussion

Knowledge towards antenatal care services among pregnant women attending Tororo General Hospital, Tororo district

According to the study findings, the majority of the respondents (84%) reported having ever heard about ANC. This implies that ANC awareness among pregnant women attending Tororo General Hospital is high probably due to health education from the health workers, TBAs, and social media channels, the table also illustrates that 52% of the information was obtained from the health workers, 32% from the social media and 16 % from the TBAs. This study is in line with the study conducted by John et al (2020) on KAPs, danger signs of pregnancy, and family planning among pregnant women in a rural area of Kerala, India where 80% of these women were aware of ANC. This also agrees with the study guideline from WHO, 2016 which showed that 75% of the respondents were aware of ANC services, but only 65% knew the recommended number of visits (WHO, 2016).

Also, the study reports that most of the women were not aware of the currently recommended visits of ANC by the WHO where 22% reported 4 visits, 32% reported 6 visits, 14% reported 8 visits and 16% reported that they should visit more than 8 times. This study also agrees with one conducted by Berhe et al 2020 which revealed that 82% of the respondents had ever heard about ANC however most of them were not aware of the recommended number of ANC visits as per the WHO's current guidelines.

The study further revealed that the majority (58%) reported that ANC should be initiated in the first trimester; most of the women (38%) reported that it

should start during the second trimester while only 4% reported that it should be started when the woman feels unwell. This agrees with the study carried out by Tefsai et al (2023) where two-thirds (59.4%) of the mothers visited the health facility during the first three months of their pregnancy. Furthermore, the same survey found that 80% of urban and 47% of rural women with a birth in the past five years preceding the survey made four or more antenatal care visits for their last birth.

Practices towards antenatal care services among pregnant women attending Tororo General Hospital, Tororo District

The study findings show that the majority of the women (60%) had attended at least 3-4 ANC visits, this is probably because of the sufficient knowledge about risks associated with not attending ANC visits, goals and benefits of ANC visits including early detection of complications, Monitoring of fetal development. This finding somehow disagrees with the study conducted by Otieno et al where he found out that 72% of the women attended at least one ANC visit but never completed the recommended four visits as per the WHO guideline back then.

In addition, the study shows that 80% of the women agreed they always take their medication and supplements 18% of them reported that they sometimes take the supplements justifying their practice that they might be too busy and end up forgetting to take the drugs, however only 2% of them reported they often take the supplements. 96% of the women accepted to have received the recommended vaccines including Tetanus diphtheria vaccines and the fansidar for malaria prevention. This finding agrees with the study carried out by Tefsai et al where among the study respondents 48 (80%) had been convinced and accepted the utilization of antenatal care and a total of 51 (85%) were seeking permission for antenatal care visits. Also, study

respondents about 35 (58%) utilized antenatal care visits during their previous pregnancies and 25 (42%) did not. About 22 (36%) preferred mother and child health centers, 10 (16%) preferred public hospitals, and 2 (5%) preferred private hospitals for antenatal care services.

Furthermore, it was found that most of the women 42% of the respondents lived 0.3 km on average away from the health facilities, 28% reported to be staying 0.75km average away from the facility, 16% stayed 1.8km away, and only 8% reported to be living more than 2km far away. This coincides with the findings in Figure 2 where 18% of the respondents may not be able to attend ANC visits due to

long distances. These findings concur with studies carried out in Uganda and Tanzania which revealed that long distances to health facilities and lack of transportation were major barriers to ANC attendance (Nankumbi et al, 2019); this study showed that 58% of women reported that long distances to health facilities were a major barrier to access ANC services, 45% of the respondents cited financial constraints as reason for them not attending ANC visits and 32% of them mentioned lack of transportation as a significant factor affecting their ability to seek ANC services.

Conclusion

The knowledge among pregnant women attending Tororo General Hospital generally good as the majority of the respondents had ever heard about ANC, then very good practices towards ANC among the pregnant women evidenced by 60% attending ANC for 3-4 times, 80% of them accepted to be following the recommendations given to them by the health care providers and also 96% having received the recommended vaccines.

Recommendation

The government should hold continuous campaigns to educate all mothers about ANC services in order to improve their knowledge, and practices towards antenatal care services through educating them about benefits of antenatal care possible risks of not attending antenatal care visits.

The MOH should construct more facilities in the rural areas to minimize the poor practices like failure to attend ANC visits being brought about by the long distances of their places of residence from the health facility.

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List of Abbreviations

ANC: Ante Natal Care

IFA: Iron Folic Acid

KAPs: Knowledge, Attitudes, Practices

LMIC: Low- and Middle-Income countries

MoH: Ministry of Health

UNICEF: United Nations International Children's Emergency

WHO: World Health Organization

Source of funding

The author declared no source of funds.

Conflict of interest

There's no conflict of interest declared.

Author's contribution

Patick Adawa, was the researcher and collected data in the study.

Sania Nakasolo acted as a supervisor during the study.

Ethical considerations

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 with assurance of confidentiality. The study was commenced after receiving a permission letter from the administration of Tororo General Referral Hospital.

Informed consent

The researcher explained the objectives of the study and ensured consent had been made by participant to take part in the study, any information obtained from the respondents was kept confidential and questionnaires stored in a lockable case.

Data availability

Availability of data will be sought from Kampala school of health sciences.

Author's Biography

Patick Adawa, a student from Kampala school of health sciences undertaking the course of diploma in clinical medicine and community health.

Sania Nakasolo, is a tutor at Kampala school of health science

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Contact: +256 702 986 663

Email: info@phafrica.org/worldhealthresearch2024@gmail.com

Website: <https://whr.phafrica.org>

Address: Scholar's Summit Nakigalala, P. O. Box 166256, Entebbe Uganda,
East Africa