

## The Provision of Antenatal Care Services Satisfaction among Expectant Women at an Intermediate Hospital, Namibia

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### Abstract

**Background:** Antenatal care remains the cost-effective intervention to monitor the wellbeing of the expectant women and her unborn foetus and identify any potential issues among other such as Pre-eclampsia, Anaemia that could harm either one of them. However, the delivery of antenatal care services should be of the highest quality should be conducted in a manner that is entirely satisfactory to the expectant women and their families, as patient satisfaction plays a significant role in quality-of-care reforms and healthcare delivery. Therefore, this study sought to investigate the satisfaction of antenatal care services among expectant women at an Intermediate hospital in Namibia.

**Methods:** A quantitative descriptive research design was applied in the study. A self-validated questionnaire was used to collect the data in the study. The total population was 416 expectant women. However, only 200 expectant women who had more than one antenatal care visits were purposively selected based on the inclusion criteria and completed the questionnaire. Descriptive statistics was used to analyse the data.

**Results:** Satisfaction levels were high (75%), with high scores attained in aspects such as effective clinic registration, effective communication by healthcare providers, facility resources such as chairs, confidentiality of personal information, privacy during examinations, and the access to ultrasound service. Participants favoured having healthcare providers with adequate knowledge and skills in offering antenatal care services. The results indicates that most expectant women were satisfied with antenatal care services at the Intermediate Hospital in Namibia.

**Conclusion:** These findings support the importance of ensuring efficient ANC service delivery and addressing factors that can negatively impact patient satisfaction. The study can serve as a basis for implementing improvements in ANC service quality and tailoring services to the specific needs of expectant women in the study area. However, though a high rate of patient ANC provision services was achieved in this study (75%), the intermediate hospital should ensure that a 100% level of service satisfaction is achieved to enhance patients' experience.

**Keywords:** Antenatal Care, Services Satisfaction, Health Care Providers.

### Introduction and Background

Globally, according to estimates in 2017 about 300,000 women died from pregnancy and childbirth-related complications, while many were left with lifetime complications (World Health Organization, [WHO], 2022). The majority of these deaths occur in low-resource settings, with Sub-Saharan Africa accounting for two-thirds of all maternal deaths. In addition, more than 5 million stillbirths and neonatal deaths occur globally (WHO, 2022). According to the Namibia Ministry of Health and Social Sciences (MOHSS, 2022), maternal mortality rate (MMR) stood at 195/ 100 000 live births in 2017, while neonatal mortality rate (NMR) stood at 20/ 1000

live births in 2020. The country is committed to achieving the Sustainable Development Goals (SDGs), by 2030, which aims to reduce to reduce the maternal mortality ratio to less than 70 per 100 000 live births and reduce neonatal mortality to at least 12 per 1000 live births (United Nation, 2023).

Antenatal care is cost-effective services provided by a skilled health care professional to expectant woman to ensure the best health outcomes for both the mother and the baby during pregnancy, childbirth and the postnatal period (Ministry of Health and Social Sciences [MHOSS], 2020). Antenatal care

provides monitoring and ongoing follow-up of maternal and foetal health during pregnancy (McNellan et al., 2019), aiming to identify any potential issues such as Pre-eclampsia, Anaemia, Diabetes Mellitus that could harm either the expectant mother or the unborn child until delivery (Ali et al., 2018). Antenatal care offers the opportunity for continuum of reproductive health care, offers a platform for crucial medical tasks such as disease prevention through screening and health education, and promoting good health (WHO, 2020). According to the MOHSS (2020), ANC has been proven to save many maternal and foetal lives through employing timely and appropriate evidence-based practices.

To reduce perinatal mortality and improve women's care experiences, the WHO recommends at least eight antenatal care contacts to low-risk expectant women (WHO, 2020), which the Namibian Healthcare system has also adopted (MHOSS, 2022). However, the delivery of antenatal care services should be of the highest quality should be conducted in a manner that is entirely satisfactory to the expectant women and their families, as patient satisfaction plays a vital role in quality-of-care reforms and healthcare delivery. International research suggests that satisfaction with various aspects of ANC received enhances treatment adherence, health outcomes, continuity of care, and the patient-provider relationship (Bleich et al., 2022). A study conducted in Ethiopia by Asres & Amogne (2023) found that high level of ANC satisfaction services was related to occupation, family size, mode of transportation, distance from the health centre and un-presence of chronic disease among expectant women. Meanwhile in South Africa, Hsai et al. (2020) reported that the healthcare provider's service produced satisfaction levels between 25% and 35%, with the waiting area amenities scoring the lowest mean satisfaction score of 2.78. Patient satisfaction is one of the indicators of a healthcare service and influences whether a service is used in a specific medical facility.

The disconnect between the expectations of patients and healthcare providers is highlighted by the patients' level of satisfaction. A satisfied client will therefore continue to use the service at a particular healthcare facility, ultimately helping pregnant women to correctly complete their ANC services' follow-up schedule, potential creating opportunities to identify and manage pregnancy complications timely (Lire et al., 2022).

In Namibia, Amungulu et al. (2023) found that obstacles to the use of antenatal care services including factors such as unfavourable attitudes of health care workers, long travel times to and from health facilities, lack of transportation funds, lack of knowledge regarding antenatal care, and attitudes toward pregnancy, consequently, the evidence of dissatisfaction with

the use of ANC's persists. The studies to assess clients and patients' health care delivery has been conducted on small scale in Namibia, yet very crucial to ensure that ANC is provided in manner that satisfied it users. Therefore, this study aimed investigate systematically the satisfaction of ANC services provision among pregnant women at an Intermediate Hospital in Namibia.

### Methodology

A quantitative descriptive research design was employed in the study to investigate systematically the satisfaction of ANC services provision among pregnant women at an Intermediate Hospital in Namibia. A self-administered validated questionnaire written in English developed in the study was used to collect the data. The questionnaire consisted of close-ended questions designed in a Likert scale format. The questionnaire had 29 questions distributed in three sections. Section A comprises of seven questions pertaining to the demographical data of the participants. Section B comprises of 17 questions pertaining the satisfaction of ANC services, and Section C comprises of five questions pertaining to the factors affecting the provision of ANC services at a Intermediate Hospital in Namibia. Validity (face, content) was observed through expert review of the data collection tool. Meanwhile, reliability to support the methodology and data instrument was observed by conducting a pilot study.

The data collection took place at the Intermediate Hospital ANC clinic private room, weekly from Monday to Thursday for one month from 08h00 to 13h00. The questionnaires were collected immediately upon completion. The total population was 416 expectant women. However, only 200 expectant women who were purposively selected based on the inclusion criteria participated in the study. The researchers analysed the data. The data collected was first captured on a Microsoft Excel spreadsheet and descriptive statistics was used to analyses the data. Data was organized in forms of pie charts, bar charts and frequency tables for easy interpretation.

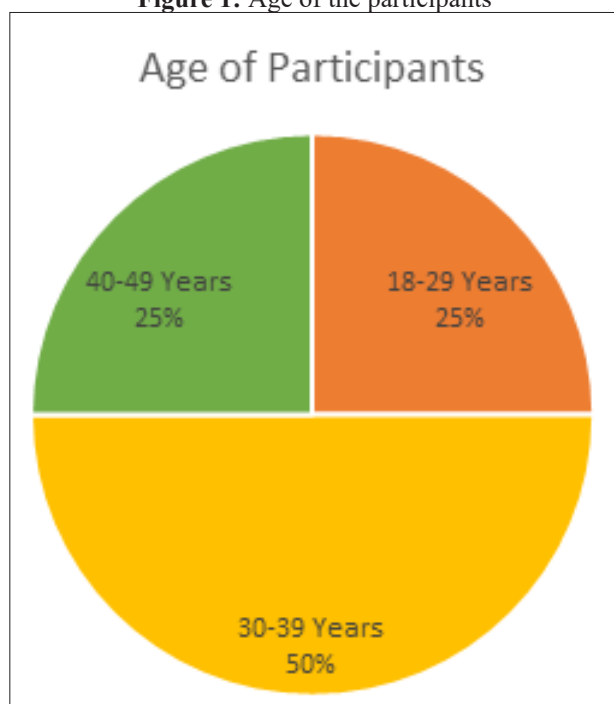
### Ethical Consideration

Ethical clearance to conduct the study was first sought from the Ministry of Health and Social Services Research Ethics Committee. Additionally, permission to conduct the study was obtained from the Medical Superintendent of the Intermediate Hospital. Meanwhile, verbal consent was obtained by the Nursing Service Manager in-charge of the ANC clinic of the Intermediate Hospital. Furthermore, the following such as informed consent, respect for a person, confidentiality, beneficence, non-maleficence and justice were observed throughout the research process.

## Results

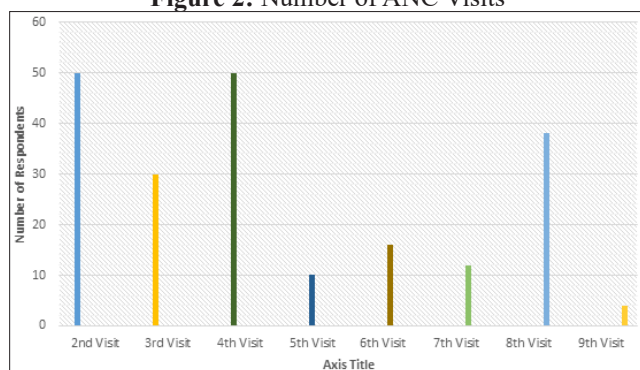
The return rate was 100% in this study. The results are presented below.

**Figure 1: Age of the participants**



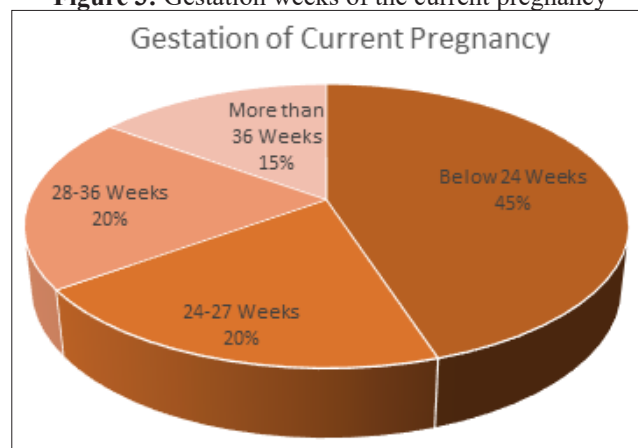
The results presented in the table above showed that n=50 (25%) participants were between the ages of 18-29 years old, while n=100 (50%) participants were between the age of 30-39. Fifty (25%) participants were between the age 40-49.

**Figure 2: Number of ANC Visits**



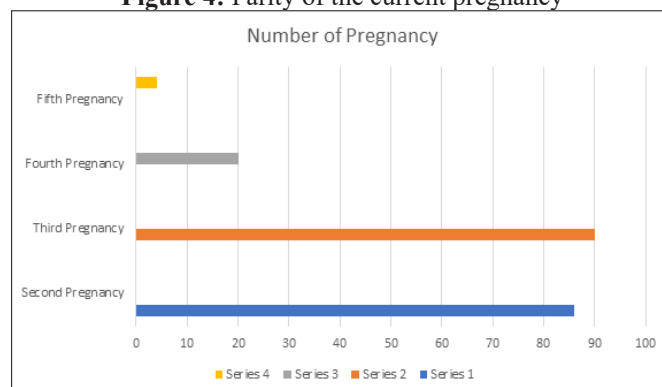
The results showed that n=50 (25%) participants were on their 2nd visit while, n= 30 (15%) participants were on their 3rd visit. Fifty (25%) participants were on their fourth visit, while n=10 (5%) participants were on their 5th visit. Sixteen (8%) participants were on their 6th visit, while n=12 (6%) participants were on their 7th visit. Thirty-eight (19%) participants were on their 8th visit and 2% were on their 9th visit.

**Figure 3: Gestation weeks of the current pregnancy**



The results indicate that n=90 (45%) participants were below 24 weeks gestation. While n= 40 (20%) participants were between 24-27 weeks gestation. Forty (20%) participants were between 28-36 weeks gestation and n=30 (15%) participants were more than 36 weeks gestation.

**Figure 4: Parity of the current pregnancy**



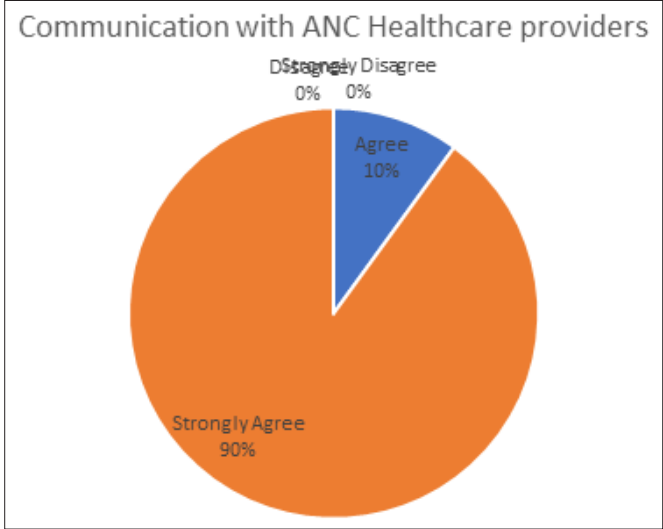
The figure above represents the parity of the participants. Ninety (45%) participants were their third pregnancy, n=86 (43%) participants were their second pregnancy, n=20 (10%) indicated that it was their fourth pregnancy and n=4 (2%) participants indicated that it was their fifth pregnancy.

**Figure 5: The efficiency of the registration process**



The figure above indicates that n=110 (55%) participants strongly agreed that at the Intermediate Hospital ANC clinic the registration process is efficiency before the antenatal care services starts while n = 90 (45%) participants agreed.

**Figure 6:** Communication between the Healthcare providers and expectant women



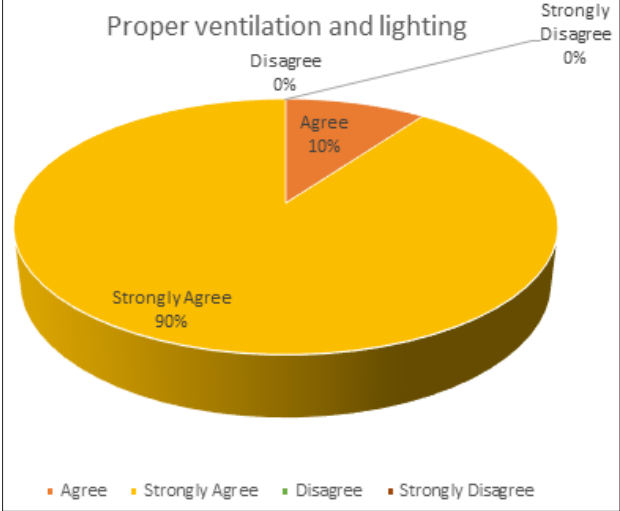
The figure above shows that n=180 (90%) participants strongly agreed that at the Intermediate Hospital ANC healthcare providers communicate well with expectant women during the ANC services, while n=20 (10%) participants agreed. This implies that most participants confirmed that ANC healthcare providers communicate well.

**Table 1:** Enough resources at the waiting areas like chairs, and medical supplies

	Number (n)	Percentage (%)	Valid Percent (%)	Cumulative Percent (%)
Strongly Agree	150	75	75	75
Agree	50	25	25	100
Disagree	0	0	0	
Strongly Disagree	0	0	0	100
Total	200	100	100	100

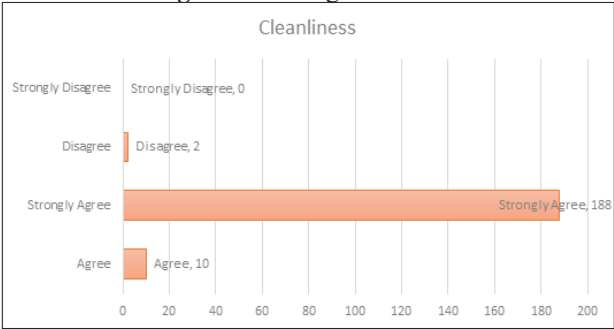
The results above indicate that n=150 (75%) participants strongly agreed that at the Intermediate Hospital ANC clinic there are enough resources at the waiting areas like chairs, and medical supplies while n= 50 (25%) participants agreed.

**Figure 7:** Proper ventilation and lighting in the waiting area



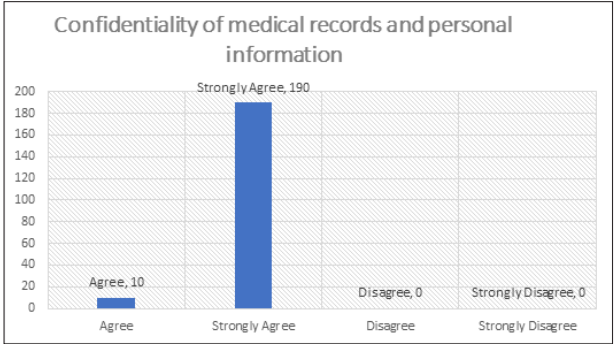
The figure above indicates that n=180 (90%) participants strongly agreed that at the Intermediate Hospital there is proper ventilation and lighting at the waiting areas. Meanwhile, n=20 (10%) participants agreed.

**Figure 8:** Setting cleanliness



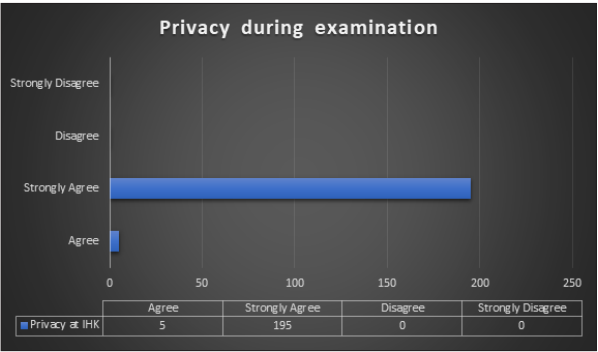
The figure above shows that n=188 (94%) participants strongly agreed that at the Intermediate Hospital ANC clinic the environment is clean. Meanwhile, n=10 (5%) participants agreed and only n=2 (1%) participants disagreed that there is no cleanliness at the Intermediate Hospital ANC clinic.

**Figure 9:** Confidentiality of medical records and personal information



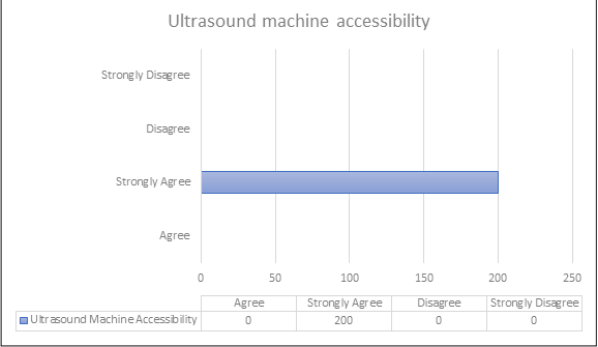
The figure above shows that n=190 (95%) participants strongly agreed that at the Intermediate Hospital ANC clinic there is confidentiality of medical records and personal information.

While n=10 (5%) participants agreed. None of the participants disagreed or strongly disagreed that there is no confidentiality of medical records and personal information.



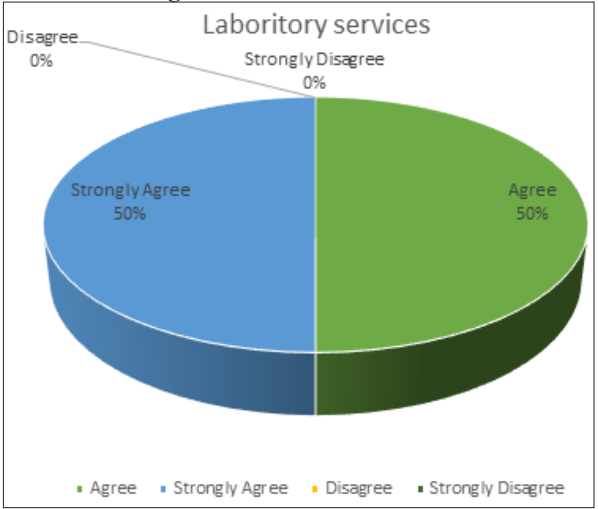
The figure above shows that n=195 (98%) participants strongly agreed that at the Intermediate Hospital ANC clinic privacy during examination is exercised. While n=5 (2%) participants agreed. This implies that ANC privacy during examination is being observed.

Figure 11: Accessibility of Ultrasound service when needed



The figure above shows that all n=200 (100%) participants strongly agreed that at the Intermediate hospital ANC clinic there is Ultrasound machine available, and the participants are able to access it when needed and the examination is done-on time.

Figure 12: Blood test results



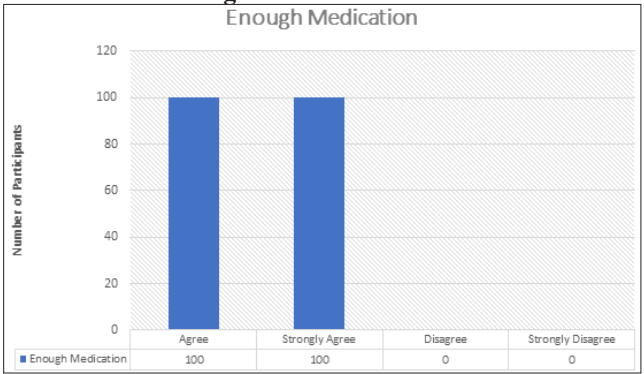
The figure above shows that n=110 (55%) participants strongly agreed that at the Intermediate Hospital ANC clinic the participants received their blood test results on time and there are no delays. Meanwhile, n= 90 (45%) participants agreed that the blood test results are available on time.

Table 2: Medical Practitioner waiting time

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	100	50	50	50
Agree	50	25	25	75
Disagree	30	15	15	90
Strongly Disagree	20	10	10	100
Total	200	100	100	100

The table above shows that n=100 (50%) participants strongly agreed that at the Intermediate Hospital there is always long waiting time to be attended to by a medical practitioner. Meanwhile, n= 50 (25%) participants agreed that the are long-waiting time to be seen by a medical practitioner. Thirty (15%) participants disagreed and n=20 (10%) participants strongly disagreed that there is no long waiting time to be attended to by a medical practitioner. This implies that at the Intermediate Hospital ANC clinic there is long waiting times to see the medical practitioner.

Figure 13: Medication



The figure above shows that n=100 (50%) participants strongly agreed that at the Intermediate Hospital ANC clinic there is enough drugs, and participants received all they prescribed medications on time. While n=100 (50%) participants agreed with this notion.



**Table 3:** Satisfaction with the service healthcare providers

Statement	Responses			
	Strongly Agree n(%)	Agree n (%)	Disagree n (%)	Strongly disagree n (%)
At the Intermediate Hospital ANC clinic, the healthcare workers provide us with good health education.	146 (73%)	54 (27%)	0 (0)	0 (0)
At Intermediate Hospital ANC clinic, the health care providers have good attitudes towards us.	160 (80%)	40 (20%)	0 (0)	0 (0)
At the Intermediate Hospital ANC clinic there are enough healthcare providers.	170 (85%)	30 (15%)	0 (0)	0 (0)
At Intermediate Hospital ANC clinic, the healthcare providers have knowledge and skills on antenatal care services.	90 (45%)	110 (55%)	0 (0)	0 (0)

**Table 4:** Factors affecting the satisfaction of the provision of ANC services among expectant women at the Intermediate Hospital.

Statement	Responses			
	Strongly Agree n(%)	Agree n (%)	Disagree n (%)	Strongly disagree n (%)
Lack of access to high-quality antenatal care affects my satisfaction on the provision of ANC services at the Intermediate Hospital.	100 (50%)	20 (10%)	50 (25%)	30 (15%)
Long waiting times for ANC services affects my satisfaction on the provision of ANC services at the Intermediate Hospital.	120 (60%)	50 (25%)	10 (5%)	10 (5%)
My satisfaction on the provision of ANC services can be affected by lack of support from the healthcare providers.	138 (69%)	17 (8%)	22 (11%)	23 (12%)
Unconducive physical environment (unhygienic, poor ventilation, lighting and lack of privacy) affects my satisfaction on the provision of ANC services at the Intermediate Hospital.	138 (69%)	17 (8%)	22 (11%)	23 (12%)
Bad attitudes from healthcare providers at the Intermediate Hospital affects my satisfaction on the ANC service delivery.	180 (90%)	16 (8%)	2 (1%)	2 (1%)
Lack of knowledge among healthcare providers regarding ANC affects my satisfaction on the ANC services provided at the Intermediate Hospital ANC clinic.	190 (95%)	2 (1%)	4 (2%)	4 (2%)

## Discussion

The 100% response rate for the questionnaires administered is quite impressive and aligns with the benchmark for academic studies (Best, 2019). High response rates are crucial for the reliability and representativeness of research findings. In this case, it suggests that the study has effectively captured the perspectives of 200 participants, enhancing the validity of the results. The study found that the majority of participants (50%) fell into the 30-39 years old age category. This demographic distribution is relevant since women in their childbearing years are more likely to be pregnant. The results align with the global understanding that antenatal care (ANC) is essential for protecting the health of women and their unborn children, particularly during this stage (UNICEF, 2023).

These findings provide insights into the specific characteristics of the study population, including the number of ANC visits, parity of the current pregnancy, and gestation weeks. Understanding these characteristics can help tailor ANC services to the specific needs of pregnant women in the study area. The study assessed several aspects of ANC service

satisfaction. The majority of participants 75% expressed strong agreement with positive aspects of ANC services at the Intermediate Hospital, indicating that the participants were satisfied with the ANC services offered at that setting. These aspects included the registration process, healthcare provider communication, availability of resources, confidentiality, cleanliness, privacy, and the provision of specific services such as ultrasound and availability of blood test results.

The study found that 50% of participants believed that a lack of access to high-quality ANC services as in table 18 could affect their satisfaction. This underlines the importance of providing quality care to all pregnant women (United Nations Children's Fund (UNICEF), 2023). The fact that 60% of participants identified long waiting times as a factor affecting their ANC services satisfaction, highlights the need to streamline service delivery to reduce waiting times at the Intermediate Hospital ANC clinic. This is also further supported by Naiker et al. (2017) who indicated that long waiting times may worsen health outcomes or reduce expected health gains, decrease patient services satisfaction compared with timely treatment.

Nearly 70% of participants believed that a lack of support from healthcare providers could impact their satisfaction table 18. The attitudes and support provided by healthcare workers are critical aspects of ANC service quality (Najafi et al., 2018). The findings reveal that bad attitudes among healthcare workers and a lack of knowledge regarding ANC could affect satisfaction. Improving healthcare workers' attitudes and training can enhance the overall patient experience (Legesse et al., 2017). This research findings considered collectively provide a comprehensive picture of ANC service offered at the Intermediate hospital, the patients' service satisfaction and the factors that influenced the patients' service satisfaction. The results indicate a generally positive experience with ANC services but also highlight areas for improvement, such as waiting times, healthcare worker attitudes, and patient education.

### Limitation

The study was conducted on a sample size of 200 participants. This sample may not be fully representative of the larger population of pregnant women receiving antenatal care, and the findings cannot be generalizable to other healthcare settings or regions. The study focused on IHK, which may have unique characteristics. The findings may not be applicable to different healthcare facilities or regions with distinct healthcare systems, resources, and patient populations. The study relied on self-reported data obtained from questionnaires. This method is susceptible to social desirability bias, where participants might provide responses, they think are socially acceptable rather than their true feelings or experiences, which can lead to overestimation of satisfaction levels.

### Conclusions

The study results indicated that 75% of participants strongly agreed that there were enough resources at the ANC clinic, including chairs and medical supplies. The findings further reveal that adverse attitudes among healthcare workers and a lack of knowledge regarding ANC could affect their services satisfaction. However, though a high rate of patient ANC provision services was achieved in this study (75%), the intermediate hospital should ensure that a 100% level of service satisfaction is achieved to enhance patients' experience.

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