

WHAT ARE THE SOCIO-DEMOGRAPHIC FACTORS INFLUENCING MALE INVOLVEMENT IN ANTENATAL CARE AMONG CLIENTS ATTENDING THE ANTENATAL CLINIC AT NEBBI GENERAL HOSPITAL, NEBBI DISTRICT?

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ABSTRACT

Background

Antenatal care (ANC) is crucial for maternal and fetal health, yet male involvement in ANC remains low globally. Despite efforts to encourage male participation, studies indicate low levels of involvement across Africa, including Uganda. This study aims to identify factors influencing male involvement in ANC at Nebbi General Hospital.

Methods

The study employed a cross-sectional quantitative approach using purposive sampling to collect data from pregnant women and their partners attending the antenatal clinic, with a final sample size of 37 participants, and data analysis conducted using SPSS version 20.0

Results

A 100% response rate with 37 participants, revealed education level, number of children, alcohol consumption, and satisfaction with services, as key determinants of male involvement.

Conclusion

Various socio-demographic factors significantly influence male participation in antenatal care (ANC), affecting maternal and child health outcomes.

Recommendation

To improve male involvement in ANC, the Ministry of Health should implement educational programs targeting men, especially those with lower education.

Nursing implications

Nurses should educate expectant mothers and their male partners on the importance of male involvement in ANC and its impact on pregnancy outcomes, advocating for flexible clinic hours.

Keywords: *Antenatal care, Male involvement, Nebbi General Hospital.*

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BACKGROUND OF THE STUDY

Antenatal care (ANC) is critical for the health and development of the fetus because it establishes a connection between the mother and her family and the healthcare system, potentially increasing the likelihood that a skilled attendant will be used at birth and promoting good health throughout the life cycle (Annie, 2021). ANC from a qualified health provider is essential to screening pregnancy and decreasing the danger of morbidity for the mother and baby during pregnancy, delivery, and postnatal period (WHO, 2015).

The idea of male involvement in maternal well-being is currently being upheld as a basic component of World

Health Organization (WHO) activity for making pregnancy more secure (Manda-Taylor et al., 2017). Traditionally, ANC has been perceived as a responsibility primarily for women, with male partners often marginalized from the process. However, there is an increasing recognition of the importance of involving men in ANC to enhance maternal and child health outcomes (Kirui, 2021).

Like in most other African nations, family planning, getting pregnant, and giving birth have traditionally been seen as matters entirely about women in South Africa (Annie, 2021). However, social and sexual domination by males can seriously increase a woman's chance of infection and unintended pregnancy. Additionally, throughout

pregnancy, a man's sexual behavior can have an impact on the health of both the mother and the unborn child (Kirui, 2021).

Globally, men continue to have a low level of involvement in mother and child health in both developed and developing nations though the World Health Organization advocates for male involvement in ANC as a crucial component of a comprehensive approach to maternal and child healthcare (Nyasiro S et al, 2019).

Similarly, in Africa there appears to be a similar trend of low male involvement, for instance in Ethiopia 25% of expectants have their husband accompany them for ANC (Mamo et al., 2017). In Tanzania, it also observed that there is a low proportion of male engagement of 56.9% (Kabanga et al., 2019). In addition, reports from Kenya show that male involvement is at 34.1% (Muia et al., 2022). According to MoH (2020), the maternal mortality ratio in Uganda remains high with 336 maternal deaths per 100,000 live births, Infant mortality is 43 deaths per 1000 live births, with 42% of the mortality occurring during the neonatal period of which most of them is as a result of low involvement of males who could assist in many ways (Babughirana, 2020). However, there are an increasing number of initiatives and programmatic efforts to come up with strategies that encourage male involvement in safe motherhood (Yargagwa & Leonardi-Bee, 2015). In Malawi and Uganda, women who were accompanied by their spouses were given priority in service provision as a strategy to encourage and support male participation in the utilization of ANC services (Atuahene et al., 2017).

This trend of low male involvement according to Byamugisha, et al. (2017) has been attributed to different factors, which have been identified in other studies as Health-facility factors, Cultural factors, and Socio-Economic factors.

According to (Auma et al. 2023), a study was carried out in the Palabek Refugee Settlement; Lamwo district, Northern Uganda, to evaluate the factors associated with male involvement in ANC, the prevalence of male participation in ANC was 39%.

Anecdotal information at Nebbi District Hospital shows there is low male involvement in antenatal care services where only 09 males attended the ANC services at Nebbi General Hospital in the financial year 2022-2023. However, there is generally limited information to explain the poor involvement of males in ANC services. Therefore, the study aims to identify socio-demographic factors influencing male involvement in antenatal care among clients attending the antenatal clinic at Nebbi General Hospital, Nebbi District.

METHODOLOGY

Study design and rationale

This study was a cross-sectional study using a quantitative approach to determine sociodemographic factors influencing male involvement in antenatal care among clients attending the antenatal clinic at Nebbi General

Hospital, Nebbi District. The selected design was optimal for data collection at a specific moment in time since the data was collected at a specific point.

Study setting and rationale

The study was conducted among clients attending the antenatal clinic at Nebbi General Hospital, Nebbi district. The hospital offers many health care services including immunization, child health services, HIV/AIDS management services, general patient management, surgery, laboratory services, nutrition services, antenatal, maternity and post-natal services, EMTCT program as well as RCT services among many others.

The hospital is located in the central business district of the town of Nebbi, in Nebbi District, in the West Nile sub-region, in Northern Uganda, about 78 kilometers (48 mi) southeast of Arua Regional Referral Hospital. Five staff usually run the ANC unit and it operates from Monday to Friday with four examination beds used for the examination of the mothers. The study setting was chosen because it was accessible by the researcher and had a specific population.

Study population

The study was conducted among pregnant women and their partners attending the antenatal clinic at Nebbi General Hospital, Nebbi district at the time of the study.

Sample size determination

The sample size was determined using the single proportion formula of Fischer et al as follows; -

$$n = (Z_{\alpha/2})^2 P (1-P)/e^2$$

Where;

n = sample size needed

Z_{α/2}=level of statistically significant at 95% confidence interval (standard value 1.96)

P= proportion of males involved in ANC services i.e. 10%

e=maximum acceptable marginal error- 5% (0.05)

$$\text{Therefore; } n_0 = 1.96^2 (0.1) (1-0.1) / (0.05)^2 = 138.3$$

n₀= 139 participants

Using the finite population factor for sample size adjustment by Glenn D. Israel 1994

$$n = \frac{n_0 \times N}{n_0 + (N-1)}$$

Where; - **N** = total number of clients attending ANC in a day =50

$$n = \frac{139 \times 50}{139 + (50-1)} = 36.96$$

n = 37 participants

Therefore, the study participants were 37. This is above the minimum number expected by UNMEB and representative of the entire population.

Sampling procedure

Purposive sampling that is a non-probability sampling technique where researchers intentionally select participants or cases available at the facility at the time of the study. This was chosen since Nebbi Hospital is a high-volume facility, which serves clients from both rural and urban settings.

Inclusion criteria

All the pregnant women and their partners attending the antenatal clinic at Nebbi General Hospital, Nebbi district at the time of study who consented to take part.

Exclusion criteria

Ill patients who could not participate in the study, insane clients and those who refused to consent to the study, and clients under 18 years.

Definition of Variables

Dependent variable

The dependent variable is the outcome or response variable that is being observed or measured.

The dependent variable was male involvement in Antenatal Care

Independent variable

An Independent variable is a variable that is manipulated or controlled by the researcher.

The independent variable was the factors influencing i.e. socio-demographic factors etc.

Research instrument

Self-administered structured questionnaires were distributed to gather data on the sociodemographic factors linked to male involvement among clients attending ANC at Nebbi General Hospital, Nebbi district. The questionnaire was composed of four parts i.e. part 1- introduction, part 2- socio-demographic characteristics. A pilot study was conducted on 5 respondents on a single day at Jupangira H/C II to ensure the reliability and validity of the tool. Errors and ambiguous questions were identified and corrected with the help of the supervisor.

Data collection procedure

Following approval, an introductory letter was obtained from the Principal of Jerusalem School of Nursing and Midwifery. The letter was then taken to the Medical Superintendent of Nebbi General Hospital. Subsequently, he introduced the researcher to the ANC ward in charge, who, in turn, introduced the researcher to the respondents. The purpose of the research was clearly explained to the respondents before they consented and filled out the

questionnaires. Data collection spanned approximately four (4) days, during which 10 respondents were obtained per day.

Data management

All study participants were given a unique identification number that was recorded in the questionnaire. The hard copies of the interview transcripts were kept under lock and key and the data was accessible only to the researcher. The questionnaires were carefully examined to verify the precision and thoroughness of the gathered information. Following that, the data were inputted, encoded, and refined using Statistical Package for Social Sciences (SPSS) version 20.0.

Data analysis

Statistical Package for Social Sciences (SPSS) version 20 was used to conduct the analysis. Descriptive statistics was used in univariate analysis to describe independent variables, which were displayed as frequencies and percentages, such as age, education level, marital status, occupation, parity, and address. Through cross-tabulation, bivariate analysis will investigate relationships between dependent and independent variables. Testing was done on categorical data (binary, ordinal, or nominal) using Fischer's exact test or Chi-Square (X²). The following numerical (continuous) variables—mode, mean, range, variance, and standard deviation—were evaluated for indicators of central tendencies. Text, tables, and graphs were used to present the findings.

Ethical consideration

Approval

Approval for the study was pursued by the Research and Ethics Committee. Furthermore, authorization was requested from the administrators i.e. MS Nebbi General Hospital. To formalize this procedure, an official letter issued by the institution was provided to the MS Nebbi General Hospital before the initiation of data collection.

Consent

A written informed consent form, delineating the research's objectives, potential advantages, associated risks, and the rights of the participants, was verbally explained to all respondents. Subsequently, participants were requested to express their consent after confirming their comprehension and willingness to participate in the study. Consent was indicated through a written signature or a thumbprint, particularly for individuals who faced challenges in writing.

Privacy

To ensure privacy, interviews with respondents were conducted in a confidential and secure environment, inaccessible to others. Additionally, all information and

data collected were entered into SPSS and promptly secured with a password. This enhanced confidentiality and safeguarded the privacy of the participants.

using initials instead of full names in all records. Access to the collected data was restricted to the research team alone, ensuring the confidentiality of participant information.

Confidentiality

The researcher carried out the data collection personally, and the gathered information was stored in a location with restricted access. Participant confidentiality was upheld by

RESULTS

Socio-demographic factors of the respondents

Table 1 shows the ages of the respondents.

	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	13	35.1	35.1	35.1
25-34	15	40.5	40.5	75.7
35-55	9	24.3	24.3	100.0
Total	37	100.0	100.0	

The age distribution of respondents showed that a larger proportion (40.5%, 15) are aged 25-34, followed by those aged 18-25 (35.1%, 13), with the smallest proportion (24.3%, 9) being in the 35-55 age bracket.

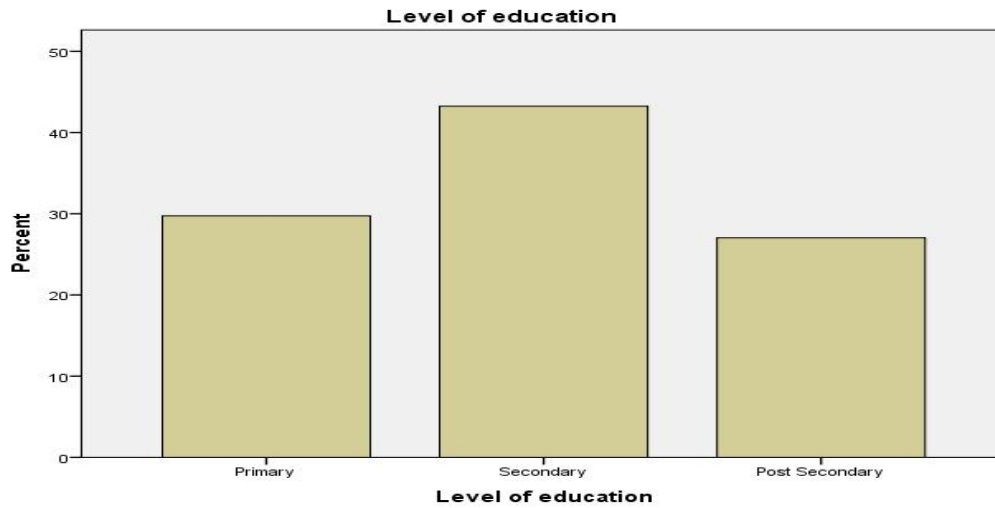


Figure 1 shows the level of education of the respondents

A larger proportion (43.2%, 16) of respondents had a secondary education compared to those with a primary education (29.7%, 11) and those with post-secondary education (27.0%, 10)

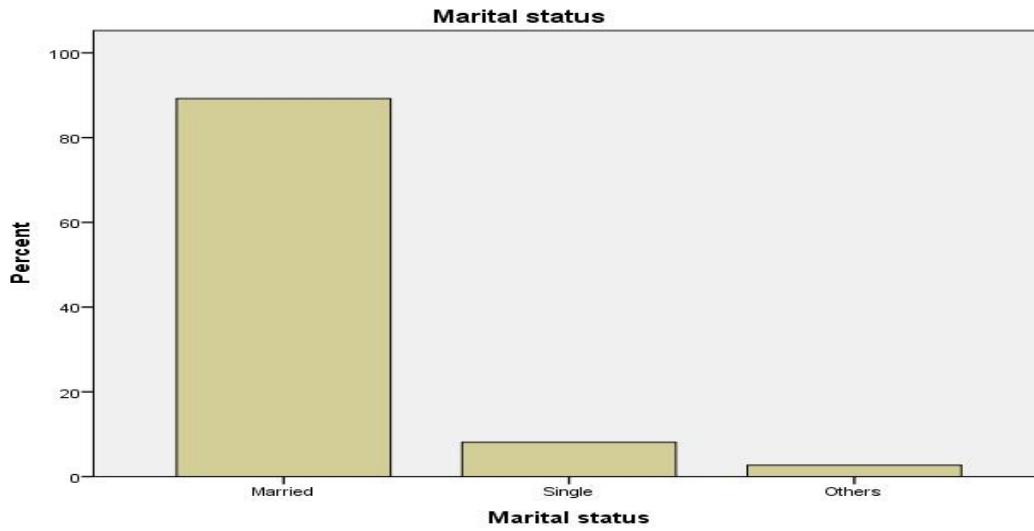


Figure 2 shows the marital status of the respondents

In marital status, the majority of respondents (89.2%, 33) were married, while 8.1% (3) were unmarried, and 2.7% (1) did not specify their marital status.

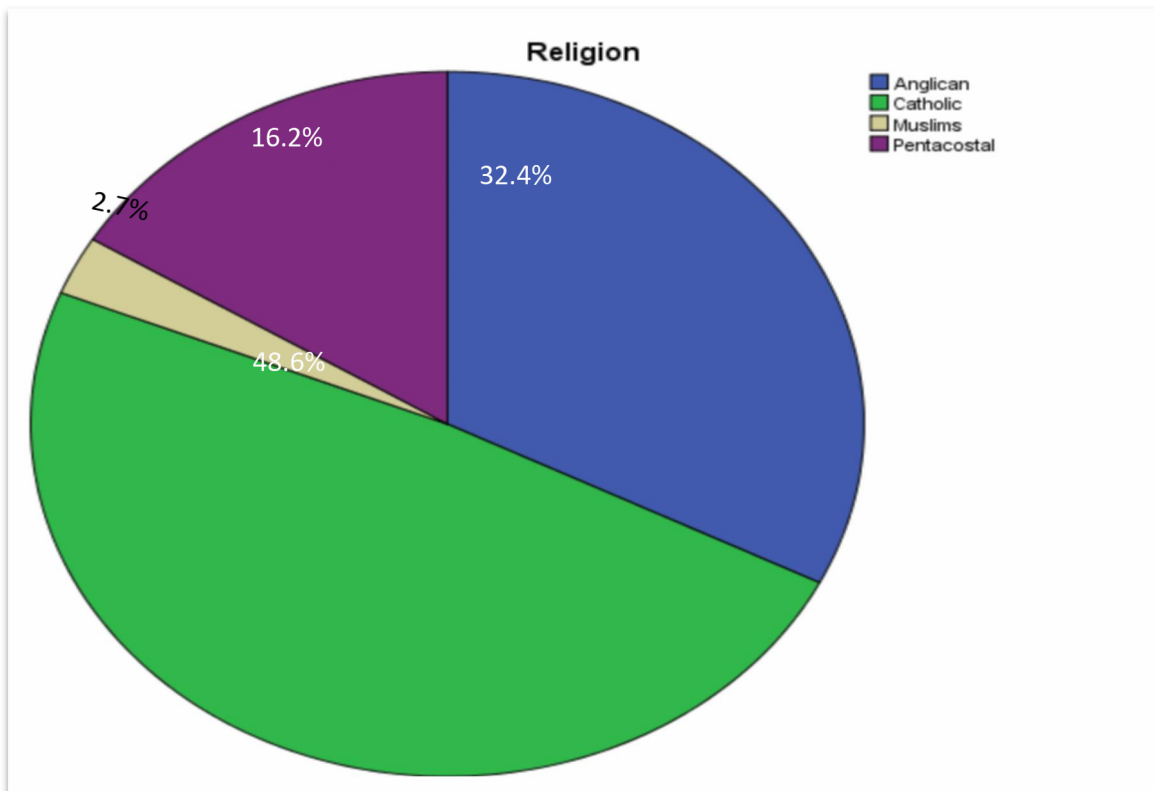


Figure 3 shows the religion of the respondents.

In terms of religion, the majority of respondents were identified as Catholic (48.6%, 18), followed by Anglican (32.4%, 12), Pentacostal (16.2%, 6), and a small proportion as Muslims (2.7%, 1).

Table 3 shows the number of children the respondents.

	Frequency	Percent	Valid Percent	Cumulative Percent
0-2	24	64.9	64.9	64.9
3-4	7	18.9	18.9	83.8
Above 4	6	16.2	16.2	100.0
Total	37	100.0	100.0	

In terms of the number of children, the majority of respondents (64.9%, 24) had 0-2 children, followed by 18.9% (7) who had 3-4 children, and 16.2% (6) who had more than 4 children.

DISCUSSION

Socio-demographic factors of the respondents

The research findings reveal that the majority of respondents (64.9%, 24) had one to two children, followed by 18.9% (7) who have three to four children, and 16.2% (6) who have more than four children, indicating a trend towards smaller family sizes among the respondents. This distribution resonates with the findings of Guspianto et al. (2022) in Indonesia, which highlight that families with two or fewer children tend to motivate husbands to actively participate in pregnancy care. In such cases, husbands are expected to play an active role in maintaining their wives' health during pregnancy. Therefore, the number of children in a family appears to influence the level of involvement of husbands in pregnancy care, with smaller families showing higher levels of spousal support during pregnancy.

A larger proportion (43.2%, 16) of respondents have a secondary education compared to those with a primary education (29.7%, 11) and those with post-secondary education (27.0%, 10), indicating a significant portion of the respondents have attained at least a secondary level of education. Studies conducted in both Afghanistan and Ethiopia underscore the influence of education on male participation in antenatal care (ANC). These findings highlight the significant impact of education on male involvement in antenatal care, suggesting that higher levels of education are associated with increased participation of men in reproductive health care services.

The majority of respondents (56.8%, 21) live in urban areas, while 43.2% (16) live in rural areas, indicating a slightly higher representation of urban dwellers in the study sample. In Ethiopia, research conducted by Mekonen et al. (2022) suggests that male partners residing in urban areas may exhibit a higher likelihood of involvement in their spouses' antenatal care (ANC) utilization compared to those living in rural areas with a similar observation made in a study by Alemi et al. (2021). These findings indicate that urban residence may positively influence male

participation in ANC, highlighting the need for targeted interventions to increase male involvement in rural areas.

The age distribution of respondents showed that a larger proportion (40.5%, 15) are aged 25-34, followed by those aged 18-25 (35.1%, 13), with the smallest proportion (24.3%, 9) being in the 35-55 age bracket. Research from Ethiopia suggests that as men's age increases, their involvement in antenatal care (ANC) decreases (Asmare et al., 2022). However, a study from Indonesia's Muaro Jambi District found that men aged 30 years or older were 1.8 times more likely to attend ANC compared to younger men (Guspianto et al., 2022). These varying findings underline the complex interplay of cultural, socioeconomic, and contextual factors influencing male involvement in ANC, emphasizing the need for context-specific interventions to promote male participation in maternal health care.

In terms of religion, the majority of respondents identify as Catholic (48.6%, 18), followed by Anglican (32.4%, 12), Pentecostal (16.2%, 6), and a small proportion as Muslims (2.7%, 1). Research from Tanzania conducted by Gibore et al. (2019) revealed that religion plays a crucial role in influencing men's involvement in antenatal care (ANC). This highlights the significance of religious affiliations in shaping attitudes and behaviors related to ANC participation among men.

On the distance to the facility, 40.5% (15) of respondents live within a medium distance, followed by 37.8% (14) who live nearby, and 21.6% (8) who live farther away. Research from Uganda conducted by Auma et al. (2023) revealed that the distance from the nearest health facility played a significant role in men's involvement in antenatal care (ANC). Men who lived more than 3 km from the nearest health facility were 0.4 times less likely to get involved in ANC compared to their counterparts who lived within 3 km of the nearest health facility. This underscores the impact of geographical proximity on men's participation in ANC.

CONCLUSION

Socio-demographic factors such as family size, education level, residence, age, and religious affiliation significantly influence male participation. Cultural and economic factors like work schedules and alcohol consumption act as barriers. Health facility factors such as space adequacy, health worker gender, and ANC discussion opportunities

influence male involvement. Understanding and addressing these factors are crucial for promoting male participation in ANC and improving maternal and child health outcomes.

RECOMMENDATION

Ministry of Health should promote education and awareness programs by developing and implementing educational programs targeting men, especially those with lower levels of education, to increase their involvement in antenatal care (ANC), collaborate with local communities, religious institutions, and schools to disseminate information on the importance of male involvement in ANC.

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LIST OF ABBREVIATIONS

ANC - Antenatal Care
WHO - World Health Organization
MoH - Ministry of Health
RCT - Reproductive and Child Health
SPSS - Statistical Package for Social Sciences
HIV - Human Immunodeficiency Virus
EMTCT - Elimination of Mother-to-Child Transmission
MS- Medical Superintendent
UNMEB - Uganda Nurses and Midwives Examinations Board

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CONFLICT OF INTEREST

No conflict of interest has been declared.

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