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Original Research Article

Assessment of Knowledge of Husbands Regarding Antenatal Care of Primigravida: A Cross-Sectional Study

Article History:

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Abstract: ***Background:*** Pregnancy, particularly the first (primigravida), is a transformative period in a woman's life, marked by profound physiological, psychological, and social changes. Effective ANC contributes significantly to reducing maternal and perinatal morbidity and mortality, enhancing the overall health and well-being of both mother and child. ***Objective:*** Objective of the study is to assess the knowledge of husbands regarding antenatal care. ***Methodology:*** A descriptive cross-sectional study was conducted at Aziz Bhatti Shaheed Teaching Hospital Gujrat over a period of four months, from July 2025 to October 2025, to assess the knowledge of husbands regarding antenatal care of primigravida women. A total of 133 participants were selected using a convenient sampling technique. Data were collected through a structured questionnaire consisting of a demographic tool and the adopted Men's Knowledge of Antenatal Care Questionnaire. Ethical approval was obtained, and informed consent was secured from all participants. Data were analyzed using SPSS version 25. ***Results:*** The study included 133 participants, with the majority aged 31–40 years (49.6%) and 74.4% aged 40 years or below. Educational backgrounds were diverse; 27.1% had Intermediate education, while 26.3% had studied in Madrasa. Most participants were employed in private jobs (45.1%) and belonged to extended families (54.9%). About 72.2% lived in households with more than 10 family members, and 54.1% reported more than two earning members. Monthly household income was relatively low, with 35.3% earning 25,000 PKR or less. Assessment of men's knowledge regarding antenatal care revealed limited awareness, with incorrect responses dominating across most areas, particularly regarding danger signs, vaccination needs, and dietary recommendations during pregnancy. ***Conclusion***: The study revealed limited knowledge of antenatal care among male participants, with most providing incorrect responses to key questions.

Keywords: Antenatal Care; Husbands' Knowledge; Primigravida; Male Involvement; Maternal Health; Cross-Sectional Study

INTRODUCTION

Pregnancy, particularly the first (primigravida), is a transformative period in a woman's life, marked by profound physiological, psychological, and social changes (Albalawi, Faheem, Thabet, & Daghash, 2023). Traditionally, antenatal care (ANC) has been viewed as a primarily maternal domain, focusing on the woman's physical well-being and the developing fetus (Onchonga, 2021).

The importance of ANC cannot be overstated. It serves as a vital platform for early detection and management of potential complications (Nesane & Mulaudzi, 2024), health promotion, and the provision

of essential information and guidance (Arsenault et al., 2024). However, the quality and effectiveness of ANC are not solely dependent on healthcare providers (Onyeze-Joe & Godin, 2020). They are profoundly influenced by the social support network surrounding the pregnant woman, with the husband playing a potentially pivotal role (Mina et al., 2023).

The emotional vulnerability and anxieties associated with first-time pregnancy often necessitate a strong support system, and the husband, as the closest confidant (Beraki et al., 2023), is ideally positioned to provide this (Htwe, 2024). His involvement can foster a sense of security, reduce stress, and enhance the woman's overall psychological well-being (Degefa, Dure, Getahun, Bukala, & Bekelcho, 2024).

Furthermore, the husband's engagement in ANC can positively impact the woman's adherence to recommended health behaviors (Nguyen et al., 2018). When husbands are informed and supportive, women are more likely to comply with dietary recommendations, take prescribed medications, and attend follow-up appointments (Degefa et al., 2024). This collaborative approach enhances the effectiveness of ANC interventions and contributes to better pregnancy outcomes (Wati, Ekasari, & Putra, 2023).

MATERIAL AND METHODS

A descriptive cross-sectional study was conducted at Aziz Bhatti Shaheed Teaching Hospital, Gujrat, over four months from July 2025 to October 2025 to assess husbands' knowledge regarding antenatal care. A sample of 133 husbands of primigravida women was calculated using Slovin's formula with a 5% margin of error from a total population of 200 and selected through convenient sampling. Eligible participants were married men living with their first-time pregnant wives who were attending antenatal care (ANC) visits and willing to provide informed consent, while husbands of women who were not primigravida, not attending ANC, living separately, unwilling to participate, or with communication barriers were excluded. After obtaining ethical approval from Chenab University and the hospital administration, participants were informed about the study, and consent was secured. Data were collected using a structured questionnaire that included a demographic form and an adopted 29-item Men's Knowledge of Antenatal Care Questionnaire (Younas et al., 2020), with correct answers scored as one and incorrect answers as zero, and categorized as poor, moderate, or good knowledge. Data collection was conducted over 2–3 months, ensuring assistance to participants when needed, and responses were entered into a secure database. The data were analyzed using SPSS version 25, with descriptive statistics such as frequency, percentage, mean, and standard deviation, and knowledge levels classified according to predefined cutoffs. Ethical considerations were strictly maintained, including confidentiality, anonymity, voluntary participation, and the right to withdraw at any time without any risk or harm.

RESULTS

Demographic Characteristics of Participants

Table 1: Demographics characteristics of participants (n=133)

Demographic Variables	Category	Frequency (f)	Percentage (%)
Age	21–30 Year	33	24.8
	31-40 Year	66	49.6
	41-50 Year	34	25.6
Level of Education	Primary, Middle & Matric	13	9.8
	Intermediate	36	27.1
	Bachelors and Masters	27	20.3
	Madrasa	35	26.3
	Illiterate	22	16.5
Occupation	Government Job	34	25.6
	Private Job	60	45.1
	Selling/ Trading	39	29.3
Type of Family	Nuclear	60	45.1
	Extended	73	54.9
Earning Members	1-2 Members	61	45.9
	More than 2 Members	72	54.1
Monthly Household Income	25 thousand or less	47	35.3
	26-45 thousand	44	33.1
	46 thousand and above	42	31.6

Table 1 shows the demographics of 133 participants. Most were aged 31–40 years (49.6%) and lived in extended

families (54.9%). Education levels varied, with the largest groups having Intermediate (27.1%) or Madrasa (26.3%) education. Nearly half worked in private jobs (45.1%), and most households had more than two earning members (54.1%). Monthly income was fairly evenly distributed across the three income categories.

Men's Knowledge of Antenatal Care

Table 2: Overall Men's Knowledge of Antenatal Care

Level of Knowledge	Frequency	Percentage
Poor Knowledge	52	39.1
Moderate Knowledge	81	60.9
Total	133	100.0

Table 4.9 summarizes the overall level of antenatal care knowledge among male participants. The majority, 60.9%, demonstrated moderate knowledge, while 39.1% had poor knowledge. Notably, none of the participants were categorized as having good knowledge.

DISCUSSION

The present study aimed to assess the knowledge of husbands regarding antenatal care (ANC) of primigravida women. The findings revealed that majority of participants had moderate knowledge, while few had poor knowledge, and none of the participants exhibited good knowledge. These findings are consistent with a study conducted in India by Sharma et al. (2021), which also reported that a majority of husbands had only moderate understanding of ANC services, and very few were aware of the comprehensive care required during pregnancy.

Age distribution showed that most participants (49.6%) were between 31–40 years, a demographic typically expected to be more involved in family life. However, even within this age group, knowledge remained moderate or poor. A similar observation was noted by Aswathy et al. (2019), who reported that age alone was not a determinant of ANC knowledge unless combined with health education or exposure to maternal health services.

Educational background revealed that only 20.3% had a bachelor's or master's degree, while a significant portion were either illiterate (16.5%) or had Madrasa education (26.3%). Lower education levels have been strongly associated with limited knowledge of maternal health, as noted by Singh and Patel (2020), who emphasized that formal education plays a key role in shaping awareness of ANC practices. Participants with higher education levels tend to be more receptive to health promotion messages and better understand the significance of antenatal checkups, nutrition, and early identification of danger signs.

Occupation data indicated that a majority were involved in private sector jobs (45.1%) or trade (29.3%), which may limit their time and access to health information sessions due to demanding work schedules. Similar findings were reported in a Bangladeshi study by Rahman et al. (2018), which concluded that job-related constraints often prevent husbands from accompanying their wives to ANC visits or actively engaging in maternal health decision-making.

The type and size of family showed that a majority lived in extended families (54.9%) and had large households, with 66.1% reporting more than 10 family members. Living in joint families may lead to dependency on elders' knowledge and cultural beliefs regarding pregnancy, which can sometimes contradict modern ANC guidelines. According to Bhattarai et al. (2022), decision-making in extended families often relies more on tradition than evidence-based health information, reducing male involvement in ANC.

In terms of earning members and income levels , households with multiple income sources (54.1%) and lower to middle income brackets (35.3% earning ≤25,000 PKR) were prominent. While financial constraints can hinder access to quality healthcare, the presence of multiple earners may help buffer costs. However, lack of health literacy continues to be a major barrier. A study conducted in Pakistan by Ahmed et al. (2017) showed that despite financial ability, many husbands did not prioritize or understand the importance of antenatal visits due to poor awareness.

The results regarding the overall level of knowledge of antenatal care (ANC) among male participants reveal that 60.9% of the men had moderate knowledge, while 39.1% had poor knowledge, with no participants categorizing as having good knowledge. These findings suggest that while some awareness of ANC exists among the male population, there is still a considerable gap in understanding, which may affect their involvement and support during the pregnancy process. The results point to a critical need for targeted educational interventions that can bridge this knowledge gap and enhance male engagement in maternal health.

The moderate to poor knowledge observed in this study aligns with findings from several studies conducted in different geographical contexts. For example, a study in Ethiopia by Tadesse et al. (2020) revealed that only 45% of husbands had sufficient knowledge about ANC, with a similar proportion exhibiting only a moderate understanding of key aspects like the importance of ANC visits and maternal nutrition. In line with our findings, this suggests that while there is some awareness, it is insufficient to empower men to take an active role in supporting their partners during pregnancy.

Similarly, Geda et al. (2018) found that in rural areas of Ethiopia, despite the availability of healthcare services, the majority of husbands had poor or moderate knowledge about ANC. This was linked to a lack of educational interventions targeting men and the traditional gender roles that limit male participation in maternal health discussions. The current study reinforces this idea, highlighting the importance of educational programs that specifically focus on improving male knowledge of maternal health.

The absence of husbands with good knowledge in our study is concerning, as comprehensive knowledge about ANC has been linked to better maternal and neonatal health outcomes. Studies, such as those by Singh et al. (2019), have demonstrated that when husbands are knowledgeable about the importance of regular ANC visits, they are more likely to encourage and support their wives in seeking timely care. Additionally, Baptista et al. (2021) found that husbands with better knowledge of maternal health practices were more likely to be actively involved in decision-making, ensuring better access to necessary health services and timely intervention during pregnancy.

Our study's finding that 60.9% of participants had moderate knowledge also reflects a growing trend of moderate awareness observed in recent studies. This suggests that while awareness of ANC is somewhat prevalent, it is often superficial or incomplete. Research by Mishra et al. (2022) highlights that moderate knowledge often stems from cultural transmission (e.g., information passed down from family members) and sporadic exposure to health programs, which may not provide a comprehensive understanding of ANC practices.

CONCLUSION

The findings of the study reveal significant gaps in men's knowledge regarding antenatal care, despite the majority of participants being in their prime working age (31–40 years) and having varied educational and occupational backgrounds. Although more than half of the participants belonged to extended families and households with multiple earning members, their understanding of essential maternal health concepts was limited. A considerable proportion lacked knowledge about the importance of early and regular antenatal visits, recognition of danger signs during pregnancy, the need for essential investigations like blood tests and screenings, and nutritional and lifestyle recommendations for pregnant women. Specifically, the majority of participants provided incorrect responses to questions on vaccinations, dietary requirements, and signs of complications in pregnancy. These results underscore the urgent need for targeted educational interventions aimed at improving men's awareness and involvement in maternal health to ensure better outcomes for mothers and newborns.

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