Volume 3, Issue 7, 2025

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

ASSESSMENT OF KNOWLEDGE OF HUSBANDS REGARDING ANTENATAL CARE OF PRIMIGRAVIDA IN A PUBLIC SECTOR HOSPITAL LAHORE

Ms. Asia Arooj[*1], Ms. Nargis Abdul Rahman[2], Muhammad Ahmad Tariq[3], Bushra Riaz[4], Ms. Haiqa Mukhtar[5]

*[*1,4,5]BSN Post RN Student, Saeed Afridi College of Nursing & Allied Health Sciences, Lahore*
[2]Principal, Saeed Afridi College of Nursing & Allied Health Sciences, Lahore
[3]Senior Lecturer, Saeed Afridi College of Nursing & Allied Health Sciences, Lahore

*[*1]asiaaroojl@gmail.com*

DOI: https://doi.org/10.5281/zenodo.17131413

Keywords
Antenatal Care, Husbands' Knowledge, Primigravida, Male Involvement, Maternal Health.

Article History
Received: 25 June 2025
Accepted: 03 September 2025
Published: 15 September 2025

Corresponding Author: *
Ms. Asia Arooj

Abstract

Background: *Pregnancy, especially the first (primigravida), brings significant physiological, psychological, and social changes. Effective antenatal care (ANC) reduces maternal and perinatal morbidity and mortality, improving maternal and child health.*

Objective: *To assess husbands' knowledge regarding antenatal care of primigravida women.*

Methodology: *A descriptive cross-sectional study was conducted at Lady Aitchison Hospital, Lahore, from December 2024 to March 2025. A total of 133 husbands were recruited using convenient sampling. Data were collected through a structured questionnaire, including demographics and the adopted Men's Knowledge of Antenatal Care Questionnaire. Ethical approval and informed consent were obtained. Data were analysed using SPSS version 25.*

Results: *Among 133 participants, most were aged 31-40 years (49.6%), with 74.4% aged ≤40 years. Educational levels varied; 27.1% had Intermediate education, while 26.3% had Madrasa education. Nearly half (45.1%) worked in private jobs, and 54.9% lived in extended families. Large households were common (72.2%with>10members), and 54.1%had more than two earners. Monthly income was low, with 35.3% earning ≤25,000 PKR.Knowledge regarding ANC was generally poor, particularly on danger signs, vaccination, and dietary needs.*

Conclusion: *Husbands demonstrated limited knowledge of antenatal care, highlighting the need for targeted male-focused educational interventions to improve maternal health outcomes.*

INTRODUCTION

Pregnancy, particularly the first (primigravida), is a transformative stage marked by profound physiological, psychological, and social changes. While antenatal care (ANC)has traditionally focused on the mother and fetus, contemporary perspectives emphasize a holistic approach that includes emotional, social, and relational dimensions (Onchonga,2021). Central to this is the husband's role, as his involvement provides critical support to primigravida women during their antenatal journey (Arsenault et al., 2024). Research increasingly highlights the importance of partner participation in enhancing maternal well-being and pregnancy outcomes (Albalawi, Faheem,

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Thabet, & Daghash, 2023). Effective ANC is vital for detecting complications early, promoting healthy behaviors, and improving maternal and perinatal health (Mina et al., 2023). However, its effectiveness is not determined solely by healthcare providers but also by the level of social and family support (Htwe, 2024). Husbands, in particular, are well-positioned to provide emotional reassurance, practical help, and encouragement for adherence to medical advice (Degefa, Dure, Getahun, Bukala, & Bekelcho, 2024). Their active involvement can improve compliance with dietary guidance, medication use, and attendance at ANC visits,ultimately contributing to better maternal and neonatal outcomes (Nguyen et al., 2018).

Despite its importance, husband involvement in ANC varies across culTural,social,and economic contexts (Degefa et al., 2024). In some societies, cultural norms or practical barriers restrict male participation, while factors such as education, awareness, and relationship dynamics also play significant roles (Onyeze-Joe & Godin, 2020). Understanding these influences is essential to designing interventions that promote male engagement (Beraki et al., 2023). This study, therefore, explores husbands' knowledge,attitudes, and practices regarding ANC for primigravida women, with the aim of identifying barriers, facilitators, and opportunities to strengthen male involvement in maternal healthcare.

Methodology

A descriptive cross-sectional study was conducted at Lady Aitchison Hospital, Lahore,over four months (December 2024-March 2025) to assess husbands' knowledge regarding antenatal care (ANC) of primigravida women. Using Solvin's formula with a 5% margin of error, a sample size of 133 participants was calculated from a population of 200.

Convenient sampling was employed to recruit married men living with their primigravida wives who were attending ANC visits and willing to provide informed consent, while those whose wives were multigravida, not attending ANC, living separately, or unable to communicate effectively were excluded. Data were collected using a structured questionnaire comprising two parts: a demographic tool (age, education, occupation,family type, income, and number of earners) and the adopted Men's Knowledge of Antenatal Care Questionnaire (Younas et al., 2020), consisting of 29 items scored as cottect=1and incorrect=0, with knowledge leveIs categorized as poor (0-9), moderate (10-19), and good (20-29). Formal ethical approval was obtained from the SACON Institute of Health Sciences and hospital administration, and written informed consent was secured from all participants. Data collection was conducted systematically,with confidentiality maintained and assistance provided where necessary.Data were analyzed using SPSS version 25, employing descriptive statistics (frequency,percentage,mean,and standard deviation) to summarize demographics and knowledge scores.

Results

4.1 Demographic characteristics of participants

Demographic Characteristics	Frequency	Percent
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

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Selling/Trading	39	29.3
Type of Family		
Nuclear	60	45.1
Extended	73	54.9
Family Members		
2-6 Members	14	10.5
7-10 Members	31	23.3
11-15 Members	51	38.3
16-50 Members	37	27.8
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

The study included 133 participants, with nearly half (49.6%) aged 31-40 years,followed by 25.6% aged 41-50 years and 24.8% aged 21-30 years. Education levels varied,with the largest group having Intermediate education (27.1%), followed by Madrasa education (26.3%), while 16.5% were illiterate. Most participants were employed in private jobs (45.1%),whereas 29.3% were engaged in selling/trading and 25.6%o in government jobs.More than half (54.9%) belonged to extended families, and 38.3% reported having 11-15family members. Regarding earning members, 54.1% had more than two contributors per household. Household income was generally low, with 35.3% earning≤2,000 PKR,33.1% earning 26,000-45,000 PKR, and 31.6% earning above 46,000 PKR.

Table 4.2: 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 4.2 summarizes the overall level of antenatal care knowledge among male participants. The majority, 60.9%, demonstrated moderate knowledIge,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

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

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 significanceof 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

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

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 proporton 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.

REFERENCES

Ahmed,M., Iqbal, N., & Asad, A. (2017). Knowledge and practices regarding antenatal care among husbands in Pakistan. Journal of Family & Community Medicine,24(3),186-191.https://doi.org/10.4103/jfcm.JFCM_154_17

Aswathy,S., Radhakrishnan, R., & Sreedharan, J.(2019). Impact of health education on husbands' knowledge of antenatal care. International Journal of Maternal and Child Health,6(2),79-85.https://doi.org/10.1007/s10995-019-0262-6

Abute Woiloro, L., Adafrie, T. T., Kerbo, A. A., & Koyra,M. M. (2025). Involvement of Husband During Antenatal Care Follow up of Pregnant Women in Ethiopia: A Systematic Review and Meta-Analysis. *SAGE Open Nursing, 11*,23779608251321144.

Albalawi, F. D., Faheem, W. A., Thabet, H., & Daghash, H. (2023). Exploring the relationship between childbirth expectations and fear among primigravida Women in Saudi Arabia. *Cureus,* 15(11).

Arsenault,C.,Mfeka-Nkabinde, N. G., Chaudhry, M., Jarhyan, P.,Taddele, T.,Mugenya,I.,... Baensch, L. (2024). Antenatal care quality and detection of risk among pregnant women: An observational study in Ethiopia, India, Kenya, and South Africa. *PLoS medicine,* 21(8),e1004446.

Baptista, M. T., Souza, J. P., & Ribeiro, A. P. (2021). Husbands' knowledge and involvement in maternal health: A cross-sectional study in a rural Brazilian setting. International Journal of Women's Health, 13, 81-89.https://doi.org/10.2147/IJWH.S305472

Bhattarai, S., Subedi, P., & Sapkota, A. (2022). Traditional beliefs and modern antenatal care practices in joint families in Nepal. BMC Pregnancy and Childbirth,22(1),82.https://doi.org/10.1186/s12884-022-04530-0.

Beraki, G. G., Ahmed, H., Michael, A., Ghide, B., Meles, B. T., Tesfatsion, B.T., &Abdulwahab, R. (2023). Factors associated with men's involvement in antenatal care visits in Asmara, Eritrea: community-based survey. *Plos one,* 18(10),e0287643.

Dahake, S., & Shinde, R. (2020). Exploring husband's attitude towards involvement in his wife's antenatal care in urban slum community of Mumbai. *Indian Journal of Community Medicine,* 45(3),320-322.

Degefa, N., Dure, A., Getahun, D., Bukala, Z., & Bekelcho, T. (2024). Male partners involvement in their wives' antenatal care and its associated factors in southern Ethiopia.A community-based cross-sectional study. *Heliyon, 10(7).*

Geda, A., Fufa, F., & Birhanu, Z. (2018). Knowledge and involvement of husbands

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

in antenatal care: A study in rural Ethiopia. Journal of Health Education Research &Development,36(3),305-313.https://doi.org/10.4172/2380-5439.1000318

Galle, A., De Melo, M., Griffin, S., Osman, N., Roelens, K., & Degomme, O. (2020). A cross-sectional study of the role of men and the knowledge of danger signs during pregnancy in southern Mozambique. *BMC pregnancy and childbirth, 20,* 1-14.

Gebremariam,H.,Tesfai,B.,Tewelde,S.,Kiflemariam,Y.,&Kibreab,F.(2023).Level of knowledge, attitude, and practice of pregnant women on antenatal care in Amatere HHealth Center,Massawa,Eritrea:a cross-sectional study,2019.Infectious *diseases in obstetrics and gynecology,* 2023(1),1912187.

Htwe,T.Z.(2024).Patterns *and Determinants of Maternal and Reproductive Health Care* Services *Utilization in Myanmar (A Case Study of Bago Township)(Tha Zin Htwe,2024).* MERAL Portal,

Jamir, A., Kharde, S., & Dalal, A. (2024). Attitudes of first-time fathers in South India toward their role in their wives' prenatal period. *Nursing for Women's Health,*28(2),128-134.

Kumar, A., Sharma, N., & Yadav, A. (2020). Male involvement in maternal health: A review of the literature. Journal of Family Medicine and Primary Care,9(4),1812-1817.https://doi.org/10.4103/jfmpc.jfmpc_33_20

Mapunda,B.,August, F., Mwakawanga, D., Mhando, I., & Mgaya, A. (2022).Prevalence and barriers to male involvement in antenatal care in Dar es Salaam, Tanzania: A facility-based mixed-methods study. *Plos one,* 17(8), e0273316.

Mina,M.N., Nuruzzaman, M., Habib, M. N., Rahman, M., Chowdhury,F.M.,Ahsan,S.N.,... Kibria, A. G. (2023). The Effectiveness of Adequate Antenatal Care in Reducing Adverse Perinatal Outcomes: Evidence From a Low-or Middle-Income Country. *Cureus,* 15(12).

Muhabaw,T.,Hailemeskel, S., & Lambebo, A. (2024). Male involvement in antenatal care and associated factors among married men with wives who recently gave birth in Debre Tabor town, North West Ethiopia. *BMC pregnancy and childbirth,* 24(1),642.

Mishra,R.,Singh, A., & Gupta, R. (2022). Gender roles and male involvement in antenatal care in rural India. International Journal of Reproductive Health,17(2),121-130.https://doi.org/10.1155/2022/8374019

Nesane, K. V., & Mulaudzi, F.M.(2024). Cultural barriers to male partners' involvement in antenatal care in Limpopo province. *Health* SA *Gesondheid,* 29(1).

Nguyen, P. H., Frongillo, E. A., Sanghvi, T.,Wable, G., Mahmud, Z., Tran, L.M.,...Ruel, M. T. (2018). Engagement of husbands in a maternal nutrition program substantially contributed to greater intake of micronutrient supplements and dietary diversity during pregnancy: results of a cluster-randomized program evaluation in Bangladesh.The *Journal of nutrition, 148(8),* 1352-1363.

Niedfeldt, H.J., Sever,T. E., Smith, R., Davis, E. A., Mulokozi, G., Torres, S.,...West,J. H. (2022). The role of men during pregnancy: A cross-sectional study of perceptions and beliefs of primary caregivers in Tanzania. *Journal of Family Issues,*43(1),3-19.

Omayma Fathy Mohammad, O. F. M., Goda, H., Osman, N., & El-Sayed, H. (2022). Assessment of Cultural and Socio-economic Factors Affecting the Involvement of Husbands in Antenatal Care from Wives' Point of View. *Mansoura Nursing* Journal,9(2),151-161.

Onchonga, D.(2021). Prenatal fear of childbirth among pregnant women and their spouses in *Kenya.Sexual & Reproductive Healthcare,* 27,100593.

Onyeze-Joe, C., & Godin, I. (2020). Experiences, views and needs of first-time fathers in pregnancy-related care: a qualitative study in south-East Nigeria. *BMC pregnancy and childbirth,20,1-11.*

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Paudel, S. R., Khatri, R. B., & Bhandari, P. M. (2021). Male involvement in maternal healthcare and its impact on maternal healt outcomes: Evidence from Nepal. BMC Public Health,21(1),1040.https://doi.org/10.1186/s12889-021-10949-2Pruthi,N.,Bacchani,S.,&

Paudel, S. R., Khatri, R. B., & Bhandari, P. M. (2020). Improving husband's involvement in maternal health: A randomized controlled trial in Nepal. BMC Pregnancy and Childbirth,20(1),101.https://doi.org/10.1186/s12884-020-2782-4

Rahman, M., Rahman, R., & Hossain, M. (2019). Socioeconomic factorsinfluencing husbands' knowledge of antenatal care in rural Bangladesh. Health Education Journal,78(6),685-693.https://doi.org/10.1177/0017896919857036

Rahman,M., Rahman, R., & Hossain, M. (2018). Factors influencing male involvement in maternal health: A study from rural Bangladesh. Health Education Journal, 77(6),674-682.https://doi.org/10.1177/0017896918798325

Sharma,N.,Yadav,A., & Kumar, R. (2021). Male involvement in antenatal care in India:A cross-sectional study of rural and urban populations. Journal of Obstetrics and Gynaecology of India,71(5),808-815.https://doi.org/10.1007/s13224-021-01489-9

Singh, V. (2020). Knowledge, attitude and practice regarding antenatal care among husbands attending antenatal clinic in a tertiary care hospital. *International Journal of Community Medicine and Public Health,* 3(7),1741.

Singh, S., & Patel, V. (2020). The role of education in improving male involvement in maternal health.Journal of Health Education Research & Development, 38(3),230-238.https://doi.org/10.1177/2382132820907971

Singh, M., Gupta, A., & Vermna, V. (2019). Male involvement in maternal healthcare:Its impact on maternal and neonatal health outcomes. Journal of Obstetrics and Gynaecology,39(3),417-423.https://doi.org/10.1080/01443615.2018.1487190

Tadesse,M.,Tesfaye,G., & Gebremedhin, S. (2020). Knowledge of husbands on maternal health care in rural Ethiopia: A community-based study. BMC Public Health, 20(1),1048.https://doi.org/10.1186/s12889-020-08998.

Tadesse, M., Tesfaye, G., & Gebremedhin, S. (2020). Husbands' knowledge and participation in maternal healthcare in Ethiopia: A longitudinal study. BMC Pregnancy and Childbirth,20(1),105.https://doi.org/10.1186/s12884-020-2837-9

Tiwari,P.,Agrawal, A., & Sharma, R. (2021). Factors influencing men's involvement in antenatal care in urban and rural settings of India. Indian Journal of Public Health,65(2),118-123.https://doi.org/10.4103/ijph.IJPH_192__19

Wati, D. S., Ekasari, W. U., & Putra, R. N. L. (2023). Effect Of Husband's Support On Pregnant Women's Compliance With Antenatal Care At Purwodadi 1 Community Health *Center.Jurnal Profesi Bidan Indonesia,3(2),9-21.*

Younas,M., Parpio, Y., Ali, T. S., & Awan, S. (2020). Male partners' knowledge and practices of antenatal care in district Swat,Khyber Pakhtunkhwa,Pakistan: A cross-sectional study. *Journal ofmidwifery and reproductive health,* 8(1),2005.

Zere, E. A., & Manyazewal, T. (2018). The role of male involvement in improving maternal health care: Evidence from a longitudinal study in Ethiopia. Journal of Health Research,32(4),259-265.https://doi.org/10.1108/JHR-12-2017-0042