

ORIGINAL ARTICLE

Obstetric Caregivers' Perspectives on Barriers and Perceived Impacts of Male Involvement in Antenatal Care and Labour in Ekiti State, Nigeria: A Qualitative Study

Adetunmise Oluseyi Olajide¹, PhD; Deborah Tolulope Esan², PhD; Ilerioluwa Taiwo Adeniyi³, MPH; Carlos Guillermo Ramos⁴, MD

¹Department of Maternal and Child Health Nursing, Faculty of Nursing Sciences, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria;

²Department of Community/Public Health Nursing, Faculty of Nursing Sciences, Bowen University Iwo, Nigeria;

³Respiratory Research Unit, University Hospitals Birmingham NHS Foundation Trust;

⁴Department of pediatrics, University of California, San Diego, USA

Corresponding Author:

Adetunmise Oluseyi Olajide, PhD; Department of Maternal and Child Health Nursing, Faculty of Nursing Sciences, Ladoke Akintola University of Technology, Ogbomoso, Postal code: 210214, Oyo State, Nigeria.

Tel/Fax: +2348037287328; Email: aoolajide27@lautech.edu.ng

Received: 21 October 2024 Revised: 27 March 2025 Accepted: 28 March 2025

ABSTRACT

Background: Husband involvement in antenatal care (ANC) and labour is linked to improved maternal and neonatal health outcomes. However, in Nigeria, male participation remains limited. While most studies focus on women's perspectives, little is known about the challenges healthcare providers face in promoting male engagement. This study explored barriers and the impact of male involvement in ANC and labour care from the perspectives of obstetric caregivers in Ekiti, Nigeria.

Methods: A qualitative study was done at a tertiary referral hospital in Ekiti, Nigeria, from June 2023 to June 2024. Twelve obstetric caregivers (six doctors and six midwives) were purposively selected based on their experience in ANC and labour care. Data were collected through two focus group discussions using a semi-structured interview guide. Thematic analysis was conducted using framework analysis following Ritchie and Spencer's five-step method, and NVivo version 12 was used for the data analysis.

Results: Five categories were emerged from the data analysis. Three categories were identified in barriers as "inadequate space and privacy concerns", "cultural and religious barriers", and "lack of awareness and education". The remained two categories regarding perceived impacts of male involvement included "improved maternal and birth outcomes" and "increased emotional support and reduced anxiety."

Conclusion: Addressing these barriers requires targeted interventions such as expanding maternity facilities, promoting community education, and integrating male-inclusive policies into maternal healthcare. These interventions can enhance family-centered maternity care and improve maternal and neonatal outcomes in Nigeria.

Keywords: Antenatal care, Maternal health, Men, Pregnancy, Qualitative study

Please cite this article as: Olajide AO, Esan DT, Adeniyi IT, Ramos CG. Obstetric Caregivers' Perspectives on Barriers and Perceived Impacts of Male Involvement in Antenatal Care and Labour in Ekiti State, Nigeria: A Qualitative Study. *IJCBNM*. 2025;13(2):94-102. doi: 10.30476/ijcbnm.2025.104532.2634.

INTRODUCTION

Maternal health remains a significant public health concern in Nigeria, with persistently high maternal and neonatal mortality rates despite continued efforts to improve healthcare services. The 2023 Nigeria Demographic and Health Survey reported a maternal mortality ratio of 1,047 deaths per 100,000 live births and a neonatal mortality rate of 55.1 deaths per 1,000 live births.¹ In response to these challenges, various interventions have been introduced, including the promotion of male involvement in maternal healthcare to improve pregnancy and childbirth outcomes.²

Husband participation in antenatal care (ANC) and labour has been associated with increased ANC attendance, improved birth preparedness, reduced maternal stress, and better neonatal outcomes.^{3, 4} A systematic review has demonstrated that male involvement leads to greater maternal healthcare utilization and a reduction in maternal morbidity and mortality.⁵ However, despite these well-documented benefits, males' involvement in Africa and Nigeria remains low.⁶⁻⁸

Existing research on male involvement in maternal care in Nigeria has largely focused on quantitative data, examining participation rates, health outcomes, and barriers.^{9, 10} However, qualitative studies exploring the perspectives of obstetric caregivers are scarce.¹¹ Previous studies in Africa and Nigeria have largely focused on the extent of male involvement in maternal care, highlighting its benefits and associated barriers. Quantitative studies have shown that male involvement in ANC is linked to improved maternal health outcomes, increased facility-based deliveries, and higher adherence to postnatal care recommendations.^{12, 13}

In Nigeria, studies indicate that while male participation in ANC and labour is gradually increasing, cultural norms, religious beliefs, and lack of awareness remain significant barriers.^{9, 14, 15} However, most of these studies have primarily focused on the perspectives

of pregnant women and their spouses, rather than healthcare providers. While they provide valuable insights into the extent of male involvement, they do not extensively explore the perspectives of obstetric caregivers—the frontline providers who play a crucial role in either facilitating or restricting male participation in maternity care.¹⁶

There is a dearth of studies in Ekiti State, Nigeria, on the perspectives of obstetric caregivers on male involvement. A deeper understanding of caregivers' perspectives is essential for identifying the barriers and the perceived impacts of male involvement in antenatal and labor care. Therefore, this study aimed to explore barriers and the impact of male involvement in ANC and labour care from the perspectives of obstetric caregivers in Ekiti State.

MATERIALS AND METHODS

This study utilized a qualitative study to gain an in-depth understanding of the barriers and perceived impacts of husband involvement in ANC and labour. A qualitative approach was chosen to capture the experiences, perceptions, and contextual challenges obstetric caregivers face in promoting males' participation in maternal healthcare. The study was conducted at a tertiary referral hospital in Ekiti State, Nigeria, between June 2023 and June 2024. A facility was selected due to its high maternal patient load, its role as a regional maternity care provider, and the observed low levels of male involvement in maternity services. The hospital has specialized departments, including Obstetrics and Gynecology, Neonatal Care, and Labour Wards, making it an ideal setting for exploring the challenges of integrating husbands into ANC and labour care.

The study focused on obstetric caregivers, specifically doctors and midwives working in the Obstetrics and Gynecology department, as they directly interact with pregnant women and their families and play a key role in shaping hospital policies and practices regarding male involvement. Participants were eligible for

inclusion if they were currently practicing in the study hospital, had a minimum of two years of experience in ANC and labour care, and provided informed consent to participate in the study. Lack of willingness to participate after the intervention and caregivers who were on leave or unavailable during the study period were excluded.

A purposive sampling technique was employed to recruit participants, while identifying doctors and midwives actively involved in ANC and labour care and inviting them to participate. The final sample size was determined based on the principle of data saturation, meaning that data collection continued until no new themes or insights emerged. A total of 12 participants were recruited, including six obstetric doctors (two residents, one senior registrar, and three consultants) and six midwives with varied levels of experience.

Data were collected through two focus group discussions (FGDs), one with doctors and one with midwives, to facilitate open discussions about their experiences and perspectives. Each FGD included six participants and lasted approximately 60 minutes. A semi-structured interview guide was used to explore the key topics, including barriers to male involvement in antenatal and labour and on perceived impacts of male involvement in ANC and labour. The semi-structured interview guide included questions such as: “What are the main barriers to male involvement in ANC and labour?” and “What impact does male involvement have on maternal and birth outcomes?” FGDs were conducted in a private hospital meeting room to ensure confidentiality, and discussions were audio-recorded with participants’ consent, supplemented by field notes. Field notes were used to document non-verbal cues, group dynamics, and key discussion points, providing additional context to complement the audio recordings in data analysis.

All audio recordings from the FGDs were transcribed verbatim and stored in password-protected digital files. To ensure

confidentiality, participants’ identities were anonymized. Data were analyzed using the thematic analysis approach, which involved five key steps: familiarizing (listening to audio recordings and reading transcripts multiple times), developing a thematic framework (identifying key themes from the transcripts), indexing (assigning codes to relevant data), charting and mapping (organizing codes into thematic categories), and interpreting (concluding and linking findings to existing literature).¹⁷ To enhance the reliability of the findings, the research team cross-checked the coded transcripts for consistency, and any discrepancies were resolved through discussion. NVivo version 12 was used for the data analysis.

To ensure the trustworthiness and rigor of the study, we implemented several strategies. Credibility was enhanced by engaging multiple caregivers and conducting member-checking with participants to validate the findings. Dependability was ensured by maintaining a detailed audit trail documenting all methodological decisions. Transferability was promoted through detailed descriptions of the study setting, participants, and methodology, allowing readers to assess the applicability of findings to other contexts. Confirmability was strengthened by having an external qualitative research expert review of the coding framework, and reflexivity was maintained through a reflexive journal documenting researchers’ assumptions and biases.

Ethical approval for the study was obtained from the hospital’s Human Research and Ethics Committee (HREC) (Ref: ERC/2018/11/26/159B). Before participation, all participants provided written informed consent. They were informed of their right to withdraw from the study at any time without consequences, and confidentiality was ensured by anonymizing the participants’ responses.

RESULTS

The mean age of obstetricians and midwives

Table 1: Characteristics of the Participants in the study

Participant Code	Occupation	Age (years)	Marital Status	Religion	Sex	Work experience (year)
P1	Obstetricians (Senior Registrar)	32	Married	Christianity	Male	3 years
P2	Obstetricians (Resident)	30	Married	Christianity	Male	2 years
P3	Obstetricians (Consultant)	32	Married	Christianity	Male	8 years
P4	Obstetricians (Resident)	31	Married	Islam	Female	2 years
P5	Obstetricians (Consultant)	32	Married	Christianity	Female	8 years
P6	Obstetricians (Consultant)	32	Married	Christianity	Female	13 years
P7	Midwife	28	Married	Christianity	Female	5 years
P8	Midwife	30	Married	Christianity	Female	3 years
P9	Midwife	31	Married	Islam	Female	3 years
P10	Midwife	28	Married	Christianity	Female	2 years
P11	Midwife	29	Single	Christianity	Female	12 years
P12	Midwife	28	Married	Christianity	Female	3 years

Table 2: Themes and Categories Generated from the Data

Categories	Themes
Inadequate space and privacy concerns Cultural and religious barriers Lack of awareness and education	Barriers to male involvement in antenatal care and labour
Improved maternal and birth outcomes Increased emotional support and reduced anxiety	Impacts of male involvement

was 30±2, with a range of 28-32. The number of their children ranged from 1 to 3. Most were married (11; 92%) and predominantly Christian (10;83%), with 2 (17%) identifying as Muslim. The group was primarily female (9; 75%) with 3(25%) males. Their years of experience varied from 2 to 13 years (Table 1).

The thematic analysis identified three major barriers to husbands’ involvement in ANC and labour, as well as two perceived impacts of male participation. The categories and themes extracted from the data are summarized in Table 2.

1. Barriers to Husbands’ Involvement in ANC and Labour

Participants mentioned some barriers related to privacy concerns, cultural and religious background, and lack of knowledge and education.

1.a. Inadequate Space and Privacy Concerns

Caregivers unanimously highlighted that limited space in labour wards was a significant infrastructural barrier to accommodating

husbands. The overcrowded maternity wards made it difficult to ensure privacy for other parturient women, discouraging facilities from allowing male partners during labour. This is supported by the following quotes:

“The health workers are supported by the husband being involved in the labour process, but the space is so constrained that we cannot accommodate them. Even though we encourage male involvement, the labour rooms are too congested to accommodate them while maintaining privacy for other women.” (P3)

“If more than one woman is in labour, privacy becomes an issue, and we cannot allow husbands in.” (P1)

“We have to prioritize the comfort of the women in labour. Many women already feel exposed, and adding more people, including husbands, increases their discomfort.” (P12)

1.b. Cultural and Religious Barriers

Traditional gender roles in Nigerian society reinforce the belief that pregnancy and childbirth are exclusively women’s

responsibilities. Many men feel uncomfortable attending ANC sessions and labour due to cultural stigma. Three participants said:

“In our community, it’s frowned upon for a man to be present during labour, and men feel their role is to support from a distance. Our culture dictates that men should not be present during labour. They are expected to wait outside and receive news after delivery.” (P5)

“Many cultures believe that pregnancy and childbirth are women’s responsibilities, and male involvement is seen as intrusive.” (P3)

“Even when some men want to be involved, their families discourage them. I’ve seen cases where the husband was willing, but his parents or elders told him it was not appropriate.” (P7)

Some participants also identified religious beliefs as a limiting factor. In some communities, Islamic norms discourage males’ presence in maternity care, further reducing participation rates. In this regard, one participant said:

“Religious beliefs and the perception that labour wards are ‘not for men’ make it difficult to promote male involvement. Some husbands tell us that their religious beliefs prevent them from witnessing childbirth.” (P1)

Ic. Lack of Awareness and Education on Male Involvement

Many men, even some healthcare workers, lack awareness about the benefits of male involvement in ANC and labour. Caregivers emphasized the need for community education programs targeting both men and women. Two participants told:

“There is a noticeable lack of awareness about the positive impact of male involvement on maternal and child health. Most men don’t know why they should be involved in ANC. They don’t realize their role in improving outcomes.” (P3)

“Even among healthcare workers, not everyone understands the importance of male involvement. Some still believe it’s unnecessary and discourage it.” (P11)

2. Impacts of Male Involvement

Participants reported several positive impacts of male involvement on maternal and neonatal outcomes. Two major categories emerged: improved maternal and birth outcomes and increased emotional support and reduced anxiety.

2.a. Improved Maternal and Birth Outcomes

Healthcare workers emphasized that male involvement contributes to healthier pregnancies, faster labour, and better maternal well-being. Male involvement allows husbands to better understand their partner’s needs, providing emotional and physical support that leads to improved pregnancy and childbirth outcomes. This is supported by the quotes below:

“When men understand pregnancy, they provide better care, resulting in healthier outcomes for both mother and child.” (P1)

“Pregnancy and labour always have better outcomes when husbands are involved.” (P5)

“When husbands are involved, women are more likely to attend all their antenatal visits, leading to better monitoring and healthier pregnancies.” (P7)

Participants stated that companionship during labour led to reduced labour time. One of them said:

“Having a husband present during labour helps reduce the time and makes the delivery process faster.” (P4)

2.b. Increased Emotional Support and Reduced Anxiety

Participants emphasized that male involvement provides emotional support, reduces anxiety, and boosts the confidence of pregnant women. Three of them stated:

“When men are involved, it shows support and boosts the morale of their wives.” (P1)

“When a husband holds his wife’s hand during labour, she feels stronger and more confident to go through the process.” (P8)

“Many women are scared of labour, but having their husbands by their side reassures them and helps them stay calm.” (P11)

DISCUSSION

This study explored barriers and impacts of husband involvement in ANC and labour care from the perspectives of obstetric caregivers in Ekiti, Nigeria. Three key barriers were identified: inadequate space and privacy concerns, cultural and religious barriers, and lack of awareness and education. Additionally, male involvement was perceived to improve maternal and birth outcomes, provide emotional support, and reduce anxiety. The findings align with previous studies in sub-Saharan Africa while revealing context-specific barriers that distinguish Nigeria from other settings.¹⁸

One major barrier identified was a lack of infrastructure relating to the absence of privacy measures, such as a lack of curtains in maternity wards. Inadequate space and privacy in maternity wards limit male participation while ensuring the privacy of other women. Similar challenges have been reported in Nigeria, Kenya, and Ghana, where overcrowded maternity wards and a lack of designated spaces hinder males' engagement.^{4, 19-21} In Ethiopia, the absence of male-friendly facilities in maternity units also restricts husbands from supporting their partners during labor.²²

Cultural norms and gender roles significantly influence males' participation in maternal healthcare in this study. In much of sub-Saharan Africa, pregnancy and childbirth are traditionally considered women's responsibilities, and men who accompany their wives to labor wards face stigma.^{11, 18} In Tanzania and Uganda, similar patriarchal structures deter males' engagement in ANC and labor care.^{23, 24}

Religious beliefs also shape males' participation in the current study. Nigeria and some Muslim communities cite religious doctrines that discourage men from being present during delivery.²⁵ However, religious leaders can play a transformative role by advocating for males' involvement in maternal health. In Ethiopia, engaging religious leaders in maternal health education improved males'

participation, demonstrating that community-driven approaches can bridge religious and cultural barriers.²⁶

A significant barrier identified in this study was the low level of awareness about the benefits of males' involvement in maternal healthcare. Many men, and even some healthcare workers, lacked knowledge about the positive impact of men's participation in ANC and labor. Similar findings have been reported in Nigeria and Ghana, where limited education and low community engagement contribute to poor male participation.^{4, 9}

In contrast, Kenya has successfully increased males' involvement through targeted health education programs, integrating partner sessions into routine ANC visits.²¹ In Tanzania, enforcing mandatory male attendance at ANC visits significantly improved engagement.²⁷ These findings highlight the need for male-targeted health campaigns, ANC partner education, and healthcare worker training in Nigeria to promote greater awareness.

Caregivers in this study reported that male involvement in ANC and labor improved maternal and birth outcomes, including shorter labor duration and reduced stress. A study from Uganda similarly found that continuous emotional and physical support from male partners led to faster deliveries and fewer medical interventions.²⁸

Additionally, male involvement has been linked to better postpartum care and neonatal health. In Ethiopia and Tanzania, husbands who were engaged in maternity care encouraged postnatal checkups and neonatal care, leading to improved maternal and newborn health outcomes.^{3, 27, 28} These findings suggest that strengthening hospital policies facilitating male participation could enhance maternal and neonatal well-being in Nigeria.

Another critical impact observed was the emotional benefit of male presence during childbirth. Women whose husbands were present exhibited reduced anxiety, greater emotional stability, and a stronger sense of security. This aligns with other findings

from Iran, where male support during labour was associated with lower maternal distress and improved coping mechanisms.²⁹ Unlike traditional maternity care models where women labor are alone, companion-based birthing approaches foster emotional security and strengthen family bonds.

The strength of this study lies in its qualitative exploration of obstetric caregivers' perspectives, an area often overlooked in research on males' involvement in maternal care. Using focus group discussions with experienced providers, it provides in-depth insights into barriers and potential solutions, offering context-specific recommendations for improving male engagement in ANC and labour care in Nigeria. Although the perspectives of pregnant women and their husbands are essential, this study specifically explored caregivers' perspectives on barriers and perceived impacts of male involvement in antenatal and labour.

CONCLUSION

This study revealed that inadequate infrastructure, cultural norms, religious beliefs, and low awareness contributed to limited male participation. However, when husbands are involved, maternal and neonatal outcomes improve, and women experience greater emotional support. Addressing these barriers requires targeted interventions such as expanding maternity facilities, promoting community education, and integrating male-inclusive policies into maternal healthcare. Future research is suggested to assess the impact of policy-driven interventions on improving male participation in maternity care. Additionally, it is recommended that barriers and impacts of male involvement in pregnancy and delivery should be explored in the views of pregnant women and their partners.

Acknowledgement

The authors sincerely thank the obstetric caregivers at the teaching hospital in Ekiti State,

Nigeria, for their participation in this study. We also appreciate the hospital management for providing the necessary support and access to conduct the research.

Authors' Contribution

A.O., D.E., and I.A. made substantial contributions to the conception and design of the study. Data collection was conducted by A.O., D.E., I.A, and C.R. Data analysis and interpretation were carried out by A.O., D.E., and C.R. All authors participated in drafting, critically reviewing, and revising the manuscript for important intellectual content. All authors have approved the final version of the manuscript for publication and agreed to be accountable for the accuracy and integrity of the work. The corresponding author attests that all listed authors meet the authorship criteria, and no individuals meeting these criteria have been omitted.

Funding Source

This research received no specific grant from any funding agency, public or private.

Conflict of Interest

The authors declare no conflict of interest.

Declaration on the use of AI

This study did not utilize Artificial Intelligence (AI)-Assisted Technology in data collection, analysis, or manuscript preparation.

REFERENCES

- 1 Federal Ministry of Health and Social Welfare of Nigeria, National Population Commission, DHS Program ICF. Nigeria Demographic and Health Survey 2023–24: Key Indicators Report. Abuja, Nigeria, USA: Federal Ministry of Health and Social Welfare of Nigeria, National Population Commission, DHS Program

- ICF; 2024.
- 2 Moyo E, Dzinamarira T, Moyo P, et al. Men's involvement in maternal health in sub-Saharan Africa: A scoping review of enablers and barriers. *Midwifery*. 2024;133:103993.
 - 3 Gessesse NA, Gela GB, Aweke AM, et al. Male partners' involvement in antenatal care and its associated factors in West-central Ethiopia. *BMC Public Health*. 2024;24:3015.
 - 4 Annoon Y, Hormenu T, Ahinkorah BO, et al. Perception of pregnant women on barriers to male involvement in antenatal care in Sekondi, Ghana. *Heliyon*. 2020;6:e04434.
 - 5 Yargawa J, Leonardi-Bee J. Male involvement and maternal health outcomes: systematic review and meta-analysis. *Journal of Epidemiology and Community Health*. 2015;69:604-12.
 - 6 Nambile Cumber S, Williams A, Elden H, et al. Fathers' involvement in pregnancy and childbirth in Africa: an integrative systematic review. *Global Health Action*. 2024;17:2372906.
 - 7 Mbadugha CJ, Anetekhai CJ, Obiekwu AL, et al. Adult male involvement in maternity care in Enugu State, Nigeria: A cross-sectional study. *European Journal of Midwifery*. 2019;3:16.
 - 8 Okoye OC, Ibeh CC, Nnebue CC, et al. Male Partners' Involvement in Maternal Health: A Community-based Cross-sectional Descriptive Study in Urban and Rural Settings in Anambra, Nigeria. *Journal of Advances in Medicine and Medical Research*. 2022;34:423-36.
 - 9 Amole T, Abubakar I, Bello M, et al. Predictors of male knowledge and participation in maternal health care in Urban Kano, Northern Nigeria. *Annals of African Medical Research*. 2023;6(1).
 - 10 Akintola TA, Akinwaare MO, Akingbade O. Perspectives on Male Involvement in Maternity Care among Male Postgraduate Students at the University of Ibadan, Nigeria. *Africa Journal of Nursing and Midwifery*. 2023;25(2).
 - 11 Watson D, Chatio S, Barker M, et al. Men's motivations, barriers to and aspirations for their families' health in the first 1000 days in sub-Saharan Africa: a secondary qualitative analysis. *BMJ Nutrition, Prevention & Health*. 2023;6:39-45.
 - 12 Chereni A, Nyathi N, Mbizo J. Male partner involvement in health interventions: A systematic review of best practices in Sub-Saharan Africa. *The Journal of Practice Teaching and Learning*. 2022;19(1-2).
 - 13 Nkwonta CA, Messias DK. Male participation in reproductive health interventions in Sub-Saharan Africa: a scoping review. *International Perspectives on Sexual and Reproductive Health*. 2019;45:71-85.
 - 14 Ojo IO, Fafure AA, Ani OB. Women's perception of male involvement during pregnancy and labor in University College Hospital, Ibadan. *International Journal of Nursing and Midwifery*. 2019;11:103-9.
 - 15 Akinyemi AO, Ibrahim EA. Prevalence and predictors of men's involvement in pregnancy care in Modakeke, Southwest Nigeria. *Frontiers in Global Women's Health*. 2024;5:1337094.
 - 16 August F, Pembe AB, Mpembeni R, et al. Community health workers can improve male involvement in maternal health: evidence from rural Tanzania. *Global Health Action*. 2016;9:30064.
 - 17 Collaço N, Wagland R, Alexis O, et al. Using the framework method for the analysis of qualitative dyadic data in health research. *Qualitative Health Research*. 2021;31:1555-64.
 - 18 Ditekemena J, Koole O, Engmann C, et al. Determinants of male involvement in maternal and child health services in sub-Saharan Africa: A review. *Reproductive Health*. 2012;9:32.
 - 19 Okwako JM, Mbuthia GW, Magutah K. Strategies for promoting male partner involvement in maternal, newborn and child health care in Kiambu County. *Pan*

- African Medical Journal. 2023;46:102.
- 20 Sharma V, Leight J, Giroux N, et al. "That's a woman's problem": a qualitative analysis to understand male involvement in maternal and newborn health in Jigawa state, northern Nigeria. *Reproductive Health*. 2019;16:143.
 - 21 Okwako JM, Mbutia GW, Magutah K. Barriers to male partner accompaniment and participation in maternal and child health care in Thika and Kiambu Level Five Hospital, Kenya. *Pan African Medical Journal*. 2023;44:189.
 - 22 Muhabaw T, Hailemeskel S, Lambebo A. 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*. 2024;24:642.
 - 23 Maluka SO, Peneza AK. Perceptions on male involvement in pregnancy and childbirth in Masasi District, Tanzania: a qualitative study. *Reproductive Health*. 2018;15:68.
 - 24 Gopal P, Fisher D, Seruwagi G, et al. Male involvement in reproductive, maternal, newborn, and child health: evaluating gaps between policy and practice in Uganda. *Reproductive Health*. 2020;17:114.
 - 25 Maiwada AM, Mamat NM, Rahman NAA, et al. Islamic perspectives of reproductive and maternal health: What role can Nigerian Muslim religious leaders play in the prevention of maternal mortality? –With Particular Reference to Zamfara State NorthWest Nigeria. *IIUM Medical Journal Malaysia*. 2018;17(1).
 - 26 Sadore AA, Kebede Y, Birhanu Z. Effectiveness of engaging religious leaders in maternal health education for improving maternal health service utilization in Ethiopia: cluster randomized controlled trial. *Front Public Health*. 2024;12:1399472.
 - 27 Peneza AK, Maluka SO. 'Unless you come with your partner you will be sent back home': strategies used to promote male involvement in antenatal care in Southern Tanzania. *Global Health Action*. 2018;11:1449724.
 - 28 Degefa N, Dure A, Getahun D, et al. Male partners' involvement in their wives' antenatal care and its associated factors in southern Ethiopia. A community-based cross-sectional study. *Heliyon*. 2024;10:e28276.
 - 29 Salehi A, Fahami F, Beigi M. The effect of presence of trained husbands beside their wives during childbirth on women's anxiety. *Iranian Journal of Nursing and Midwifery Research*. 2016;21:611-5.