

PATERNAL PARTICIPATION IN BIRTH PREPAREDNESS AND COMPLICATION READINESS DURING CHILDBIRTH: REVIEW PAPER

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Abstract

Background: Humans reproduce through a unique biological process known as childbirth, which marks the start of life outside the mother's womb. Males play a crucial role in ensuring safe childbirth. Birth Preparedness and Complication Readiness (BPCR) is a strategy that prepares for birth by identifying blood donors, selecting a delivery location, ensuring the availability of skilled birth attendants, budgeting for transportation, and recognising early signs of complications.

Objectives: To determine the level of male participation in birth preparedness and complication readiness and its associated factors during childbirth.

Method and materials: For the literature review, systematic search strategies were adopted to identify relevant Studies. Literature review searched with different databases like Cinahl, PubMed, Google Scholar, Scopus, SciInfo, \ and ResearchGate using keywords such as "male participation" and "birth preparedness, and complication readiness was used to locate the necessary literature. A search in an initial database yielded about 43,000 records. Finally, 11 studies were included.

Result: the reviewed studies highlight key insights regarding paternal involvement in birth preparedness and complication readiness. There are significant concerns surrounding infant and maternal mortality rates, which are found to be high. Mostly, participants were inadequately prepared for birth, whereas complication readiness, Socio-economic factors, particularly employment status, showed a positive correlation with these aspects of preparedness.

Conclusion: There are substantial deficiencies in birth preparedness and complication readiness (BPCR) practices. High maternal and neonatal mortality rates continue despite universal healthcare initiatives. There is an urgent need for enhanced awareness and targeted interventions to improve BPCR and tackle maternal and newborn health issues.

INTRODUCTION

BACKGROUND

Humans reproduce through a unique biological process known as childbirth, which marks the start of life outside the mother's womb. It represents a pleasant and meaningful milestone for parents.

However, there may also be potential complications. (Loseva & Gladyshev, 2024)

Birth is a medical and emotional event that impacts the entire family. Throughout the life cycle, males' role is vital, and their involvement in promoting proper nutrition, encouraging

antenatal care visits, and addressing cultural barriers helps ensure safer childbirth, transforming a potentially high-risk event into a well-managed transition for both mother and infant. (Olza et al., 2020)

Birth Preparedness and Complication Readiness (BPCR) is a strategy plan that ensures timely preparedness for birth while anticipating possible difficulties. It emphasises the importance of identifying potential blood donors, selecting a suitable delivery location, arranging for a skilled birth attendant to be present, allocating funds for transportation and care, and recognising early warning signs of pregnancy complications. (Kotelchuck, 2022) Collectively, these approaches allow effective emergency interventions and help decrease risks associated with unexpected maternal and newborn health difficulties. (CHUA and SHOREY, 2024)

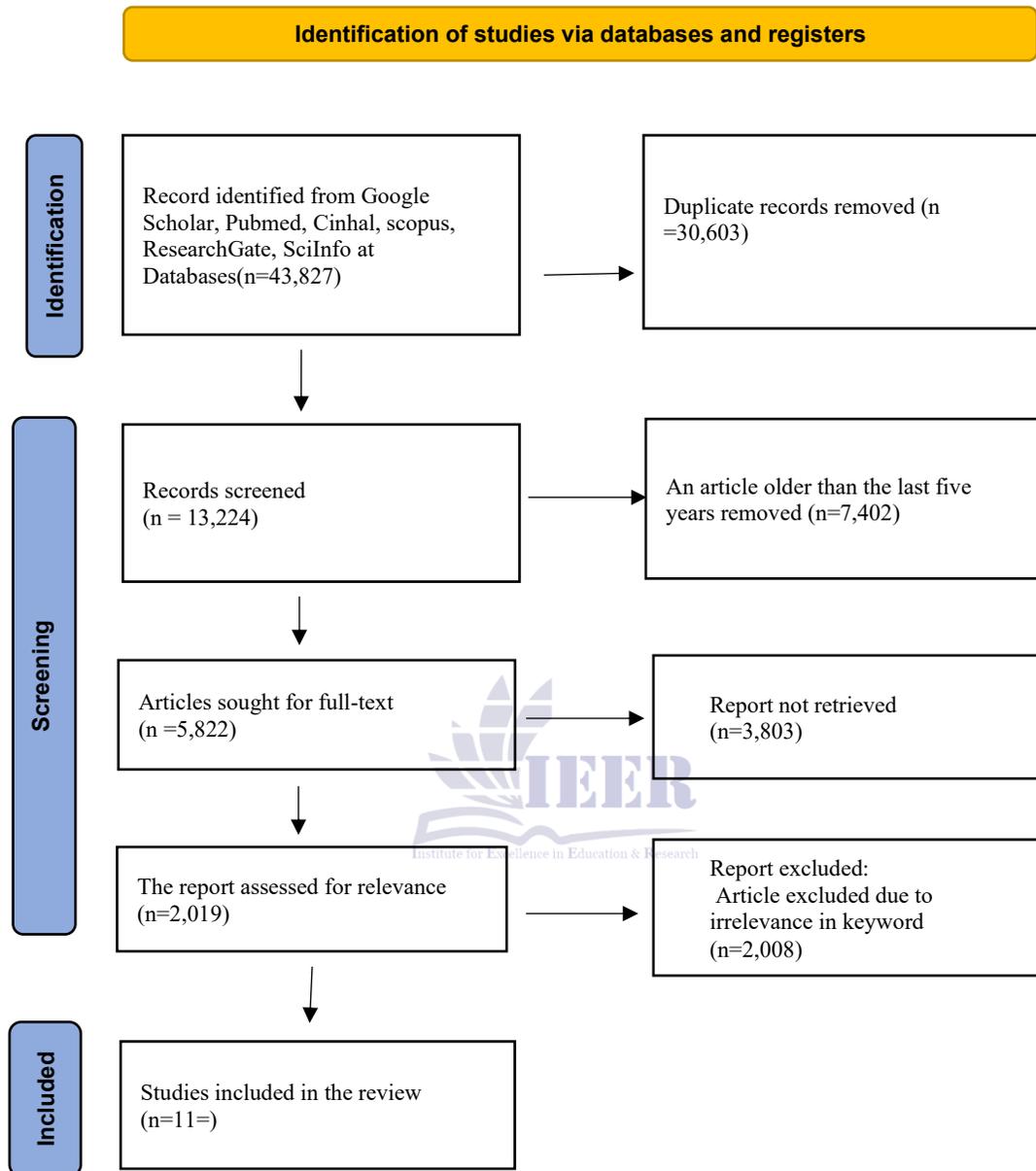
About 300,000 women are estimated to die annually all over the world as a result of pregnancy and childbirth-related complications. Approximately 99 per cent of these deaths of

mothers happen in developing nations. (Sufian et al., 2022) The maternal mortality ratio (MMR) in Pakistan is 186 per 100,000 live births, especially in the rural areas, and the highest was recorded in Baluchistan province at 298 deaths per 100,000 live births. (Arif et al., 2022) The rate of neonatal deaths has been estimated at 46 neonatal deaths per 1,000 live births. Preparedness of husbands leads to better maternal nutrition and emotional support, which may decrease maternal stress and minimise the risk of preterm birth and low birth weight, which are key causes of neonatal mortality. (Muhammad et al., 2024)

The current literature on maternal health and birth preparedness primarily addresses women, especially mothers and pregnant women. Nevertheless, little attention has been paid to the role of husbands, as they play an important role in decision-making and access to maternal care in most settings. This evidence gap regarding male involvement is a good opportunity to identify a research gap that needs to be addressed through further research.



Prisma chart



Method and materials:

For the literature review, systematic search strategies were adopted to identify relevant Studies. Literature review searched with different databases like Cinahl, PubMed, Google Scholar, Scopus, SciInfo, and ResearchGate using keywords such as “ale participation,” and “ birth preparedness, and complication readiness was used to locate the necessary literature with the help of Boolean operators (AND, OR) that narrowed

down the search results through keyword combination. A search in an initial database yielded about 43,000 records. The rest of the studies that did not focus on husband participation in birth preparedness and complication preparedness, were in non-English literature, or did not provide access to the full text, were filtered out, leaving 13 studies that met the final inclusion criteria.

Authors(s) & year	Location	Study design	Key findings.
Ely et al., 2024	U.S	cross-sectional study	IMR reported at 5.61 deaths per 1,000 live births
Tamir, 2024	Africa	cross-sectional study	Neonatal mortality rate was recorded as 28.96 deaths per 1,000 live births.
Thomas et al., 2022	Ethiopia	Cross-sectional study	Reported 43 neonatal deaths (11.4%), 37 (9.8%) of which happened during the first week and 6 (3.95) during the 7-28 days of life.
Feyisa Balcha et al., 2024	Ethiopia	Cross-sectional study	Only thirty-two point two per cent of respondents were ready to give birth
Mar Mwaiswelo et al., 2024	Tanzania	Cross-sectional study	The results showed that a low level of complication preparedness was found in 60 per cent of participants, a moderate level in 26 per cent, and a high level in only 14 per cent.
Prajapati Maharjan et al., 2022	Nepal	Community-based cross-sectional	Approximately, husbands were 78.2% birth-prepared.
Mohandas et al., 2022	India	Descriptive Cross-sectional	The researchers concluded that half of the husbands were extremely involved in the birth preparedness and complication preparedness.
Arohee et al., 2024	India	Descriptive cross-sectional	This paper established that male involvement in Birth preparedness and complication readiness was only 28.29 per cent.
Anwar Jasim et al., 2023	Pakistan	Perspective cohort study	The result documents 18 deaths; the approximate maternal mortality ratio was 238 deaths per 100,000 live births.
Negesa et al., 2024	Ethiopia	Analytical cross-sectional	The findings show a strong correlation between employment status and birth preparedness and complication readiness.
(Sapkota et al., 2024	Nepal	Analytical cross-sectional	Financially stable participants were almost fivefold more likely to be well prepared.

Result: The reviewed studies collectively offer important insights into the paternal participation in birth preparedness and complication readiness. The infant and neonatal health issues remain a major concern, with the infant mortality rate (IMR) at 5.61 deaths per 1,000 live births, and the Neonatal Mortality Rate at 28.96 deaths per 1,000 live births.

birth preparedness, only 32.2% were adequately prepared for birth, while complication readiness was low in 60%, moderate in 26%, and high in only 14%. However, other studies reported that only 32.2% were prepared for birth, with approximately 78.2% of husbands prepared, and half of husbands showing strong involvement in

birth preparation and readiness for complications. In contrast, only 28.29% of males participated.

The socio-economic factors were significantly associated with birth preparation and readiness for complications. Employment status had a significant positive correlation with husbands' involvement, and being financially stable was nearly five times higher among those who were well prepared.

Conclusion:

The extensive review of literature consistently reveals significant and widespread deficiencies in birth preparedness and complication readiness practices across diverse global settings, particularly

in low-resource and rural communities. Despite ongoing policy measures and the presence of universal healthcare systems in some contexts, challenges such as high neonatal and maternal mortality persist. Studies from various countries, including Ethiopia, Nepal, Tanzania, India, and Pakistan, consistently show low BPCR levels, with specific indicators often falling below adequate thresholds. Identified factors influencing preparedness include education, socioeconomic status, and engagement with antenatal care. These findings collectively highlight a critical global need for enhanced awareness and targeted interventions to improve BPCR, emphasizing the urgency for context-specific research and strategies to address these persistent challenges in maternal and newborn health.

Recommendation;

Based on the study's findings, several recommendations were proposed to enhance male participation in birth preparedness and complication readiness.

Strengthen Male Participation Programs:

Health officials and community organisations should create targeted interventions and educational programs to engage spouses in antenatal care actively. Workshops, counselling sessions, and awareness campaigns can all help boost knowledge and participation.

Socioeconomic Support and Empowerment:

Given the strong link between financial stability and BPCR, authorities should investigate ways to improve the socioeconomic status of rural families. Income-generating activities, microfinance programs, and job support can all help husbands prepare for childbirth.

Future Research:

Additional longitudinal and interventional studies are recommended to investigate the most effective techniques for boosting male participation in birth preparedness and complication readiness

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