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THE WEIGHT OF THE UNKNOWN: PSYCHOLOGICAL DETERMINANTS OF CHILDBIRTH FEAR IN FIRST-TIME MOTHERS

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ABSTRACT

Background: Fear of childbirth (FOC), or tokophobia, is a significant yet under-recognized maternal mental health issue that can negatively impact labour outcomes, maternal wellbeing, and postpartum adjustment. **Aim:** To estimate the prevalence of FOC among primigravida women and examine its association with sociodemographic and psychological factors. **Methods:** A cross-sectional observational study was conducted among 114 primigravida women in their third trimester (≥28 weeks) attending a tertiary-care hospital. Data were collected using a structured questionnaire along with validated tools: Wijma Delivery Expectancy Questionnaire (W- DEQ A) for FOC, Generalized Anxiety Disorder scale (GAD-7), and Edinburgh Postnatal Depression Scale (EPDS). Statistical analysis was performed using SPSS version 26 with descriptive statistics and chi-square tests; $p < 0.05$ was considered statistically significant. **Results:** The mean age of participants was 25.17 years. Most participants were from rural areas (78.07%) and had graduate-level education (42.11%). Depressive symptoms were observed in 57.02% of women, while 28.95% reported moderate anxiety. No significant association was found between residence and depression ($p = 0.410$) or education and anxiety ($p = 0.199$). However, socioeconomic status showed a significant association with depression ($p = 0.008$). **Conclusion:** FOC is common among primigravida women and is closely linked to psychological distress, particularly depression and anxiety. Integrating routine mental health screening and targeted interventions into antenatal care is essential to improve maternal outcomes.

KEYWORDS

INTRODUCTION

Pregnancy and childbirth are profound life events, yet for many women they are accompanied by significant psychological distress. Fear of childbirth (FOC), also known as tokophobia, is increasingly recognised as a major maternal mental health concern. It has been described as *"an intense state of anxiety which leads some women to fear childbirth and consequently to avoid pregnancy despite desperately wanting a baby"*[1]. This fear can adversely influence the entire perinatal period, contributing to prolonged labour, increased obstetric interventions, postpartum depression, impaired bonding, and reduced maternal confidence[2] .Globally, the prevalence of FOC is estimated at around 14%, though reported rates vary widely- from 3.6% to 82.6%—depending on population characteristics and measurement tools[3] . In India, emerging evidence suggests that FOC is both common and under_addressed. A study from rural Karnataka reported that 45.4% of pregnant women experienced fear of childbirth[1], while research from Tamil Nadu found a prevalence of 17.9% among primigravida women, noting that fear was significantly associated with anxiety, low confidence, and insecure spousal employment[3]. Similarly, a study from Manipur observed that 36% of pregnant women had FOC, with higher fear among those in the third trimester and those with a history of abortion[4].

International findings mirror these patterns. A recent study from Türkiye emphasised that fear of birth is a common psychological problem that "negatively affects prenatal attachment, childbirth-related self-efficacy, the postpartum period, parenting development and women's health"[5]. The same study demonstrated that higher fear scores were significantly associated with lower prenatal attachment and reduced childbirth self_efficacy, highlighting the broader psychosocial impact of FOC on maternal adaptation.

Psychological factors—particularly anxiety, depression, and low childbirth self_efficacy—consistently emerge as strong predictors of FOC. For example, the Tamil Nadu study reported that women with anxiety had 4.8 times higher odds of experiencing FOC [5]. Social and contextual factors, including unplanned pregnancy, lack of support, negative birth stories, and limited knowledge about labour, further intensify these fears[1,4].

Despite its clinical significance, FOC remains insufficiently integrated into routine antenatal care in many low_ and middle_income countries, including India. Given the rising caesarean section rates, the growing emphasis on maternal mental health, and the documented consequences of FOC on both psychological and obstetric outcomes, there is a pressing need to better understand its prevalence, determinants, and implications in diverse Indian populations. Strengthening evidence in this area can guide the development of targeted antenatal interventions—such as psychoeducation, counselling, and self_efficacy–enhancing strategies—to improve maternal wellbeing and birth outcomes.

Aim

To estimate the prevalence of fear of childbirth among primigravida women using Wijma delivery expectancy questionnaires(W-DEQ A)

Objectives

- To examine the association between socio-demographic characteristics and fear of childbirth.
- To assess the relationship between psychological factors (such as anxiety, depression, and self- confidence regarding childbirth) and fear of childbirth.
- To evaluate the influence of social and cultural factors on the occurrence of fear of childbirth.

MATERIALS AND METHODS

A cross-sectional observational study was conducted among primigravida women attending the antenatal clinic of a tertiary-care hospital to assess the prevalence of fear of childbirth (FOC) and its associated determinants. The study focused on 114 women in the third trimester (≥28 weeks) receiving routine antenatal care. Participants were approached during antenatal visits, and after obtaining informed consent, data were collected in a private setting with assistance provided when required. Ethical approval was obtained from the Institutional Ethics Committee, and confidentiality and anonymity were strictly maintained.

Inclusion Criteria

- Age 18–40 years
- Singleton pregnancy
- Gestational age ≥28 weeks
- Able to understand study language
- Provided informed consent

Exclusion Criteria

- Known psychiatric illness / treatment
- High-risk pregnancy(e.g., preeclampsia, placenta previa)
- Multiple gestation
- Prior antenatal hospitalization

Data Collection

Data were collected using a pre-tested structured questionnaire capturing sociodemographic, obstetric, and psychosocial variables, along with validated tools including the Wijma Delivery Expectancy Questionnaire (W-DEQ A) for assessing fear of childbirth (scores ≥85 indicating severe FOC), the Generalized Anxiety Disorder scale (GAD-7) for anxiety assessment, and the Edinburgh Postnatal Depression Scale (EPDS) for screening depressive symptoms.

Statistical Analysis

Statistical analysis was performed using SPSS software version 26, applying descriptive statistics and chi-square tests, with $p < 0.05$ considered statistically significant.

RESULTS

The collected data were analysed using SPSS. Descriptive statistics revealed that the mean age of participants was 25.17 years. The majority (78.07%) belonged to rural areas, and most participants were graduates (42.11%). More than half of the participants (57.02%) exhibited depressive symptoms, while 28.95% had moderate anxiety levels. Chi-square analysis showed no statistically significant association between residence and depression level ($p = 0.410$) or education and anxiety level ($p = 0.199$). However, a statistically significant association was found between socio-economic status and depression level ($p = 0.008$).

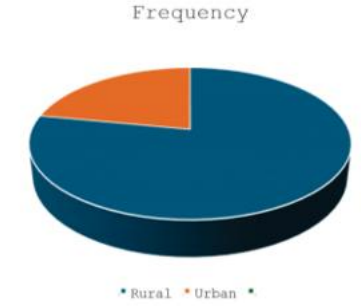
1. Descriptive Statistics

1.1 Age

Mean age: 25.17 years (range: early 20s to 30 years)

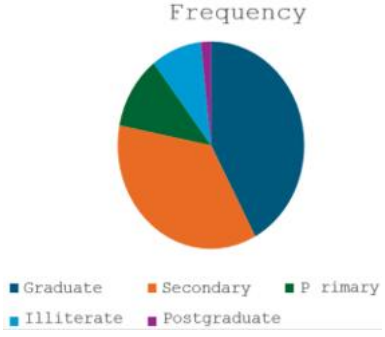
1.2 Residence

Residence	Frequency	Percentage
Rural	89	78.07%
Urban	25	21.93%



1.3 Education

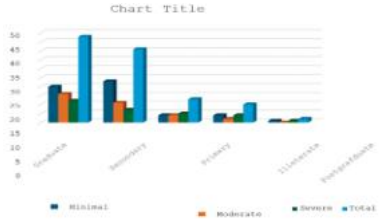
Education Level	Frequency	Percentage
Graduate	48	42.11%
Secondary	41	35.97%
Primary	13	11.40%
Illiterate	10	8.77%
Postgraduate	2	1.75%



1.4 Anxiety Level (GAD-7)

Anxiety Level	Frequency	Percentage
Minimal	24	21.05%
Mild	28	24.56%
Moderate	33	28.95%
Severe	29	25.44%

1.5 Anxiety Level by Education



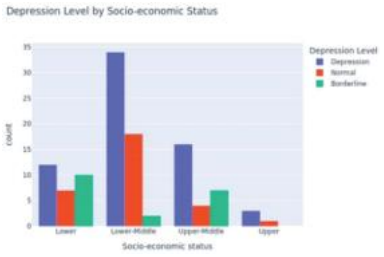
1.6 Socio-economic Status

Socio-economic status	Frequency	Percentage
Lower	54	47.37%
Lower-Middle	29	25.44%
Upper-Middle	27	23.68%
Upper	4	3.51%

1.7 Depression Level (EPDS)

Depression Level	Frequency	Percentage
Depression	65	57.02%
Boderline	19	16.67%
Normal	30	26.32%

1.8 Depression Level by Socioeconomic Status



DISCUSSION

The present study assessed the prevalence and determinants of fear of childbirth (FOC) among primigravida women in their third trimester using the W_DEQ (A), along with psychological and sociodemographic correlates. The findings reinforce the growing evidence that childbirth fear is a significant yet under_recognized maternal mental health concern in India.

A striking observation in this study was the high burden of psychological distress, with 57.02% of participants exhibiting depressive symptoms and 28.95% reporting moderate anxiety. These findings align with previous Indian studies that have consistently demonstrated strong associations between anxiety, depression, and FOC. For instance, the Tamil Nadu study reported that women with anxiety had nearly five times higher odds of experiencing FOC[3]. The current study's psychological profile suggests that emotional vulnerability is common among primigravida women, particularly in late pregnancy, and may substantially contribute to heightened childbirth fear.

The sociodemographic profile of the sample—predominantly rural (78.07%) and largely educated up to graduate level (42. 11%)—reflects the population served by many tertiary-care hospitals in India. Although residence and education did not show statistically significant associations with anxiety or depression, socioeconomic status demonstrated a significant relationship with depression ($p = 0.008$). This finding is consistent with broader maternal mental health literature, which identifies financial insecurity as a major stressor during pregnancy. Studies from Karnataka [1] and Manipur[3] similarly noted that women from lower socioeconomic backgrounds reported higher psychological distress and greater childbirth fear.

The high prevalence of depressive symptoms in this study may also reflect contextual stressors such as limited social support, unplanned pregnancies, or exposure to negative birth narratives—factors repeatedly identified as contributors to FOC in both Indian and international research[1,3,4]. The Turkish study by Gürsoy & Karaca[5] highlighted that fear of birth adversely affects prenatal attachment and childbirth self_efficacy. Although self_efficacy was not directly measured in the present study, the elevated levels of anxiety and depression suggest that many participants may have reduced confidence in their ability to cope with labour.

Importantly, the study underscores the gap in routine antenatal mental health screening. Despite the documented consequences of FOC—such as prolonged labour, increased obstetric interventions, and postpartum emotional difficulties [2] —FOC remains insufficiently addressed in antenatal care settings in India. The high psychological burden observed in this study reinforces the need for integrating mental health assessments, counselling, and childbirth education into routine antenatal services.

Overall, the findings contribute to the growing body of Indian evidence demonstrating that FOC is influenced by a complex interplay of

psychological, social, and economic factors. Addressing these determinants through targeted interventions may improve maternal wellbeing and birth outcomes.

CONCLUSION

This study highlights that fear of childbirth is a significant concern among primigravida women in their third trimester, closely intertwined with psychological distress—particularly anxiety and depression. More than half of the participants exhibited depressive symptoms, and nearly one_third reported moderate anxiety, underscoring the emotional vulnerability of first_time mothers. Socioeconomic status emerged as a significant determinant of depression, reflecting the broader influence of social and financial stressors on maternal mental health.

The findings emphasise the urgent need to integrate systematic screening for FOC, anxiety, and depression into routine antenatal care. Interventions such as psychoeducation, supportive counselling, and strategies to enhance childbirth self_efficacy may help reduce fear and improve both psychological and obstetric outcomes. Strengthening awareness and early identification of FOC can contribute to more positive childbirth experiences and better maternal wellbeing.

REFERENCES

1. Johnson AR, Kumar MG, Jacob R, Jessie MA, Mary F, Agrawal T, et al. Fear of childbirth among pregnant women availing antenatal services in a maternity hospital in rural Karnataka. Indian J Psychol Med. 2019;41(4):318_22.
2. Webb R, Ayers S, Bogaerts A, Jeličić L, Pawlicka P, Van Haeken S, et al. When birth is not as expected: a systematic review of the impact of a mismatch between expectations and experiences. BMC Pregnancy Childbirth. 2021;21:475.
3. Immanuel R, Cherian AG, Marconi DS. Fear of childbirth, its prevalence, and its predictors in Indian primigravida women: a cross_sectional observational study. CHRISMED J Health Res.2025;12(1):22_8.
4. Rajkumari B, Ingudam D, Yengkokpam C, Devi SB, Chanu LR, Ranalcis R. Prevalence and predictors of fear of childbirth among pregnant women attending a tertiary care hospital in Imphal_East District, Manipur: a cross_sectional study. Natl J Community Med. 2024;15(10):850_6.5. Gürsoy B, Karaca PP. The relationship between fear of birth and prenatal attachment and childbirth self_efficacy perception in primigravida women. BMC Pregnancy Childbirth. 2025;25:462
6. Rúger-Navarrete A, Vázquez-Lara JM, Antúnez-Calvente I, Rodríguez-Díaz L, Riesco-González FJ, Palomo-Gómez R, et al. Antenatal fear of childbirth as a risk factor for a bad childbirth experience. Healthcare. 2023;11(3):297. doi:10.3390/healthcare 11030297
7. Jaju S, Al Kharusi L, Gowri V. Antenatal prevalence of fear associated with childbirth and depressed mood in primigravid women. Indian J Psychiatry. 2015;57(2):158–61.
8. Jha P, Larsson M, Christensson K, Svanberg AS. Fear of childbirth and depressive symptoms among postnatal women: A cross-sectional survey from Chhattisgarh, India. Women Birth. 2018;31(2):e122–33.