



Fear of Childbirth (Tokophobia) among Primigravida Women: A Descriptive Study in Dehradun, Uttarakhand.

Ms. Neha Ali, Assistant Professor Dr. Sheeba Philip Principal, Mr. Renjith Thomas, Vice Principal, Ms. Deepika Rawat, Nursing Tutor, Sai college of Nursing, Dehradun Uttarakhand.

Abstract

Background: Fear of childbirth (tokophobia) is a growing concern among primigravida women, often linked to adverse maternal and neonatal outcomes.

Objectives: To assess the level of fear of childbirth among primigravida women in a selected hospital of Dehradun.

Methods: A descriptive research design was adopted. A total of 120 primigravida women were selected using purposive sampling. Data were collected using a structured tokophobia scale. Reliability and validity of the tool were ensured through expert review and pilot testing. Ethical clearance and informed consent were obtained.

Results: Findings revealed that 17.5% of participants had low fear, 77.5% had moderate fear, and 5% experienced high fear of childbirth.

Conclusion: The majority of primigravida women experienced moderate levels of fear, highlighting the need for antenatal counselling, psychological support, and effective childbirth preparation programs to reduce tokophobia and promote positive maternal health outcomes.

Keywords: Tokophobia, childbirth fear, primigravida women, maternal health, psychological support.

Introduction

Background and need of the study.

Pregnancy and childbirth are significant life events that bring physical, emotional, psychological, and social changes in a woman's life. Although pregnancy is often considered a joyful experience, many women experience anxiety and fear regarding labor and delivery. Fear of childbirth (FOC) refers to the fear, anxiety, or concern associated with the process of labor and childbirth and may range from mild apprehension to severe psychological distress.¹

Primigravida women are particularly vulnerable to fear of childbirth because they lack previous childbirth experience. Their perceptions are often influenced by stories from relatives, friends, social media, and cultural beliefs. Fear of labor pain, uncertainty regarding the childbirth process, concerns about complications, and lack of knowledge are common contributing factors.²

Fear of childbirth has become an important maternal health issue worldwide. Studies have reported that women with severe fear may experience increased stress during pregnancy and reduced confidence in their

ability to give birth. Fear may also influence decision-making regarding the mode of delivery and increase requests for elective cesarean section without medical indication.¹

Research findings indicate that severe fear of childbirth is associated with adverse maternal and neonatal outcomes such as prolonged labor, increased use of pain relief methods, operative deliveries, postpartum anxiety, depression, and difficulties in maternal-infant bonding. Therefore, early identification of childbirth-related fears is essential for promoting positive maternal health outcomes.¹

The prevalence of fear of childbirth varies across different populations. A systematic review reported that approximately 14% of pregnant women experience severe fear of childbirth, while a larger proportion experience mild to moderate levels of fear.¹ Studies among Indian primigravida women have also reported significant levels of childbirth-related fear, particularly fear of labor pain, obstetric interventions, and complications during delivery.³⁻⁴

In India, antenatal care services primarily focus on physical health assessment and monitoring of pregnancy. However, psychological concerns such as fear of childbirth often remain under-recognized. Cultural beliefs, lack of childbirth education, inadequate support systems, and misconceptions regarding labor may further increase fear among first-time mothers.⁴

Nurses play a crucial role in identifying psychological concerns during pregnancy and providing appropriate counseling and support. Assessment of fear of childbirth among primigravida women can help healthcare professionals develop effective educational and supportive interventions aimed at improving maternal confidence and childbirth experiences. Therefore, the present study is undertaken to assess the fear of childbirth among primigravida women.¹

Research statement

“A Descriptive Study to Assess the Fear of Childbirth among Primigravida Women in a Selected Hospital of Dehradun, Uttarakhand”

Objectives

1. To assess the level of fear of childbirth (tokophobia) among primigravida women admitted in a selected hospital of Dehradun, Uttarakhand.
2. “To find the association between demographic variables and levels of fear of childbirth (tokophobia) among primigravida women in a selected hospital of Dehradun, Uttarakhand.”

Assumptions

1. Primigravida women may experience different levels of fear of childbirth.
2. The level of fear may vary based on demographic variables such as age, education, and type of family.
3. Participants will provide honest and accurate responses during data collection.

Inclusion Criteria

1. Primigravida women admitted in the selected hospital of Dehradun.
2. Women who are willing to participate in the study.
3. Women who can understand and respond to the questions.

Exclusion Criteria

1. Multigravida women.
2. Primigravida women with high-risk pregnancy conditions (e.g., preeclampsia, gestational diabetes).
3. Women who are not willing to participate.
4. Women who are critically ill or unable to communicate.

Methodology

- **Design:** Descriptive cross-sectional, quantitative approach.
- **Setting:** Antenatal OPDs of selected hospitals in Dehradun (PHC Mehuwala, CHC Raipur, Kanishk, Coronation, Nirmal Ashram).
- **Sample:** 120 primigravida women, selected by purposive sampling.
- **Tool:** Structured questionnaire –
 - *Part A:* Demographic profile.
 - *Part B:* Tokophobia Severity Scale (13 items, scores 0–39 → Low, Moderate, High).
- **Validity & Reliability:** Expert validated; Cronbach's alpha = **0.82**.
- **Pilot Study:** Conducted on 10 women to ensure clarity and feasibility.
- **Ethical Considerations:** Ethical clearance was obtained from the institutional ethical committee. Informed consent was taken from all participants. In addition, formal permission to use the *Tokophobia Severity Scale* was obtained from Dr. Bethany Wootton, the original developer of the tool.
- **Analysis:** Descriptive statistics (frequency, %, mean, SD) + Chi-square test for associations.

Results:

1. **Section I: Distribution of participants according to demographic variables**
2. **Section II: Distribution of participants based on their tokophobia score**

SECTION I: DISTRIBUTION OF PARTICIPANTS ACCORDING TO DEMOGRAPHIC VARIABLES

The demographic data of 120 primigravida women was analyzed in terms of age, educational status, occupation, residential area, type of family, gestational age, planned or unplanned pregnancy, history of anxiety or depression, exposure to childbirth stories, attendance in antenatal classes, and source of information about childbirth.

Table 1: Distribution of Participants According to Demographic Variables (n=120)

Demographic Variable	Category	Frequency (n)	Percentage (%)
Age (in years)	Below 20	10	8.3%
	20–25	35	29.2%
	26–30	45	37.5%
	31–35	20	16.7%
	Above 35	10	8.3%
Educational Status	No formal education	8	6.7%
	Primary	22	18.3%
	Secondary	48	40.0%
	Graduate & above	42	35.0%
Occupation	Homemaker	70	58.3%
	Private job	30	25.0%
	Government job	12	10.0%
	Others	8	6.7%
Residential Area	Rural	65	54.2%
	Urban	55	45.8%
Type of Family	Nuclear	72	60.0%
	Joint	48	40.0%
Planned/Unplanned Pregnancy	Planned	88	73.3%
	Unplanned	32	26.7%
History of Anxiety or Depression	Yes	28	23.3%

	No	92	76.7%
Previous Exposure to Childbirth Stories	Yes	82	68.3%
	No	38	31.7%
If Yes, by Whom (n = 82)	Friends	30	36.6%
	Family	35	42.7%
	Media	17	20.7%
Attended Antenatal Classes	Yes	45	37.5%
	No	75	62.5%
Source of Information About Childbirth	Healthcare Provider	50	41.7%
	Internet	18	15.0%
	Friends/Family	34	28.3%
	Books	10	8.3%
	Others	8	6.7%

Table 1 illustrates the demographic characteristics of 120 primigravida mothers. The majority of the participants (37.5%) were in the age group of 26–30 years, followed by 29.2% in the 20–25 years group. A smaller proportion of mothers were either below 20 years or above 35 years, each comprising 8.3% of the sample. Regarding educational status, most mothers (40%) had completed secondary education, while 35% were graduates or above, showing a relatively educated population. In terms of occupation, 58.3% were homemakers, and 25% were working in private jobs. Only a small percentage were in government jobs (10%) or reported other forms of employment (6.7%).

The majority of the participants (54.2%) belonged to rural areas, while 45.8% resided in urban settings. A higher proportion of mothers (60%) lived in nuclear families compared to 40% in joint families. The mean gestational age was 32.5 weeks, indicating most participants were in their third trimester. A large percentage (73.3%) had planned pregnancies, while 26.7% were unplanned. Only 23.3% had a history of anxiety or depression, whereas the majority (76.7%) reported no such history.

When asked about previous exposure to childbirth stories, 68.3% of participants reported being exposed, with the most common sources being family (42.7%) and friends (36.6%), followed by media (20.7%). Antenatal class attendance was reported by 37.5% of the mothers, while 62.5% had never attended such classes. Healthcare providers were the most frequently cited source of information about childbirth (41.7%), followed by friends or family (28.3%), internet (15%), books (8.3%), and others (6.7%).

Table 4: Distribution of Participants According to Tokophobia Levels (n=120)

S. No.	Tokophobia Score Range	Interpretation Level	Frequency (n)	Percentage (%)
1	0 – 13	Low Fear	21	17.5%
2	14 – 26	Moderate Fear	93	77.5%
3	27 – 39	High Fear	6	5.0%
Total	—	—	120	100%

Table 1 presents the distribution of primigravida women based on their level of fear of childbirth (tokophobia), as assessed through a structured questionnaire. The findings revealed that a majority of the participants (77.5%) experienced moderate levels of fear, scoring between 14 and 26 on the tokophobia scale. A smaller proportion (17.5%) exhibited low levels of fear, scoring between 0 and 13. Notably, only 5% of the participants demonstrated high levels of fear, with scores ranging from 27 to 39.

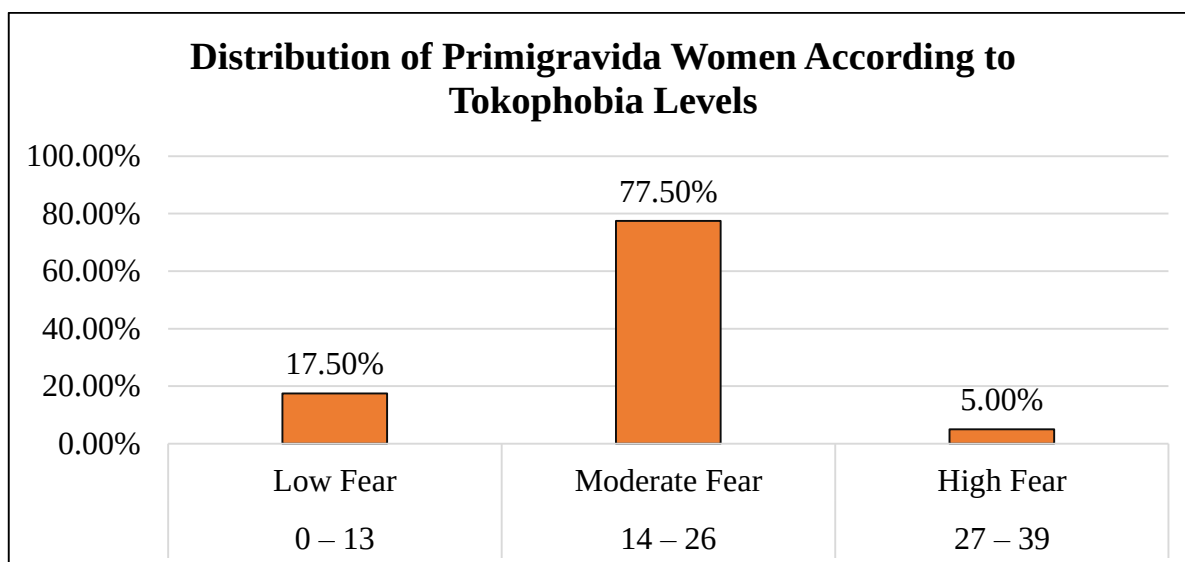


Figure 1: Distribution of Primigravida Women According to Tokophobia Levels

This figure illustrates the distribution of fear of childbirth (tokophobia) among primigravida women ($n = 120$). The findings reveal that the majority of participants (77.5%) experienced a moderate level of fear, while 17.5% reported low levels of fear, and only 5% exhibited high fear. These results indicate that moderate fear of childbirth is the most prevalent among primigravida mothers in the study sample.

Table 2: Association Between Demographic Variables and Levels of Fear of Childbirth Among Primigravida Women ($n = 120$)

Demographic Variable	Category	High Fear	Average Fear	Low Fear	Chi-Square Value	p-value	df	Table Value	Result
Age in years	18–23 years	13	24	6	19.177	0.004	6	12.59	Significant
	24–29 years	9	30	12					
	30–35 years	3	10	12					
	Above 35 years	1	1	0					
Gestational Age (in weeks)	Less than 28 weeks	10	3	7	16.813	0.002	4	11.07	Significant
	28–36 weeks	9	10	13					
	Above 36 weeks	6	30	22					
Educational Status	No formal education	8	7	6	17.604	0.007	6	12.59	Significant
	Middle	9	10	7					
	Higher Secondary	8	16	11					
	Graduate & above	0	10	18					
Occupation	Unemployed	18	34	29	8.212	0.084	4	9.49	Not Significant
	Self-employed	7	8	7					
	Employed	0	1	6					
Type of Family	Nuclear family	12	14	14	1.899	0.387	2	5.99	Not Significant
	Joint family	13	29	28					
Residence	Rural	19	37	31	2.111	0.348	2	5.99	Not Significant
	Urban	6	6	11					

The table 2: presents the association between selected demographic variables and the levels of fear of childbirth among 120 primigravida women:

- Age was significantly associated with the level of fear ($\chi^2 = 19.177, p = 0.004$). Women aged 18–23 years reported higher fear levels compared to older age groups.
- Gestational Age also showed a statistically significant relationship with fear levels ($\chi^2 = 16.813, p = 0.002$). Women in the advanced stages of pregnancy (above 36 weeks) intended to report lower levels of fear, possibly due to adaptation or preparation for childbirth.
- Educational Status was significantly associated with fear levels ($\chi^2 = 17.604, p = 0.007$). Women with no formal education exhibited high levels of fear, while those with graduate-level education showed lower fear, suggesting that education may provide reassurance or better coping strategies.
- Occupation, Type of Family, and Residence did not show statistically significant associations with fear levels, indicating that these factors might not play a major role in influencing childbirth-related fear among the study participants.

Discussion

Objective 1: To assess the level of fear of childbirth (tokophobia) among primigravida women

In this study, the majority of primigravida women (77.5%) reported moderate fear, while 5% experienced high levels of tokophobia. This aligns with findings by **Umaz and Amin² (2024)**, who observed that among primigravida women in Kashmir, 39.1% had moderate fear and 22.7% had high fear—highlighting the vulnerability of first-time mothers to childbirth anxiety⁽³³⁾ Similarly, in rural Karnataka, nearly 45.4% of pregnant women expressed fear of childbirth, with primigravida women notably more affected⁽³⁴⁾

Objective 2: To determine the association between selected demographic variables and fear of childbirth.

Our study found that younger women (especially aged 18–23 years) and those in early gestation (<28 weeks) had higher levels of fear, while better educational status was associated with lower fear. **Umaz & Amin's² (2024)** study corroborated these findings: age, gestational age, and educational status significantly influenced fear levels, with a sizable proportion experiencing moderate to high fear¹ This pattern is further supported by a **scoping review** among Asian women showing that demographic factors—such as younger age, lower educational level, and primiparity—were strongly linked to higher childbirth fear. The review also emphasized the protective role of childbirth education and antenatal information⁽³⁵⁾

Nursing Implications

The findings of the study have implications for nursing practice, administration, education, and research.

1. Nursing Practice

1. Nurses and midwives should screen primigravida women for tokophobia during antenatal visits.
2. Provide continuous psychological support, reassurance, and individualized counselling.
3. Encourage participation in antenatal classes and birth-preparation programs.

2. Nursing Administration

1. Develop policies to integrate routine fear-of-childbirth assessment tools in antenatal clinics.
2. Organize workshops and community programs addressing maternal mental health.
3. Ensure availability of multidisciplinary teams (obstetrician, psychologist, midwife, nurse).

3. Nursing Education

1. Include modules on perinatal mental health and tokophobia management in nursing curricula.
2. Train nursing students in communication skills, counselling, and empathetic care approaches.

4. Nursing Research

1. Conduct longitudinal studies to evaluate how fear of childbirth influences delivery outcomes.
2. Explore effectiveness of nurse-led antenatal interventions (e.g., counselling, mindfulness, childbirth simulation).
3. Develop culturally tailored educational materials addressing childbirth fears.

Recommendations

- 1) Antenatal clinics should routinely assess and address fear of childbirth using structured tools.
- 2) Encourage antenatal class attendance to build confidence and reduce misconceptions.
- 3) Disseminate positive birth stories through peer-support groups to counter negative narratives.
- 4) Incorporate psychological counselling sessions as part of routine antenatal care.
- 5) Policymakers should integrate maternal mental health into national reproductive health programs.

Recommendations for Further Research

1. Comparative studies between primigravida vs. multigravida women on childbirth fear.
2. Interventional studies on the impact of prenatal counselling programs in reducing tokophobia.
3. Cross-cultural studies to examine differences in fear levels across urban vs. rural populations.
4. Qualitative research to explore personal experiences and coping strategies of women with severe tokophobia.

Limitations

1. The study was confined to 120 primigravida women, which limits generalizability.
2. Self-reported data may have response bias.
3. Conducted in a single setting; multi-centre data would provide wider applicability.
4. Cross-sectional design limits understanding of changes in fear levels across pregnancy stages.

Conclusion

Most primigravida women in Dehradun experienced moderate fear of childbirth, emphasizing the importance of early screening and supportive interventions during antenatal care. Nurses and midwives play a crucial role in addressing maternal anxiety through counselling, health education, and antenatal classes. Integrating psychological support and routine assessment of childbirth fear into maternal health services could reduce tokophobia, enhance maternal confidence, and promote positive pregnancy and birth outcomes.

References

1. Nilsson C, Hessman E, Sjöblom H, et al. Definitions, measurements and prevalence of fear of childbirth: A systematic review. *BMC Pregnancy and Childbirth*. 2018;18:28.
2. Nazir U, Amin U. Fear of childbirth among primigravida women: A cross-sectional analytical study. *The Nursing Journal of India*. 2024;115(4):165-171.
3. Demšar K, Svetina M, Verdenik I, et al. Tokophobia (fear of childbirth): Prevalence and risk factors. *Journal of Perinatal Medicine*. 2018;46(2):151-154.
4. Immanuel R, Cherian AG, Marconi S. Fear of childbirth, its prevalence and its predictors in Indian primigravida women: A cross-sectional observational study. *CHRISMED Journal of Health and Research*. 2025;12(1):22-28.
5. Bhardwaj M, Sinwal A, Sharma VS, et al. Tokophobia: A fear of childbirth and pregnancy – An overview. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*. 2024.