

Fear of Childbirth among Pregnant Women in a Hospital, Kathmandu

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ABSTRACT

Introduction: Fear of childbirth is a significant concern that can affect a woman's health, well-being, and relationships during and after pregnancy. It can lead to distress for the woman and her family, as well as increase the risk of complications during childbirth. So, this study aims to assess the level of fear of child birth and identify associated factors among pregnant women in the hospital of Kathmandu.

Methods: A descriptive cross-sectional study was conducted enrolling 418 pregnant women attending outpatient department of Paropakar Maternity and women's Hospital. Participants were selected using a Purposive sampling technique. Ethical approval was obtained prior to the study from Institutional Review Committee of Paropakar Maternity and women's Hospital. Data was collected through a-structured interview questionnaire from an extensive literature review. The collected data was analyzed using Statistical Package for the Social Sciences (SPSS) version 23, with both descriptive and inferential statistics. Statistical significance was determined at a p-value <0.05 with a 95% confidence level in bivariate analysis.

Results: More than half of the respondents (56.7%) reported high fear of childbirth, while 43.3% reported low fear. Several factors were significantly associated with higher fear of childbirth. Maternal age above 27 years were associated with higher fear (OR = 0.61, 95% CI: 0.41-0.89, p = 0.01). Women who were homemakers (OR = 3.05, 95% CI: 1.22-7.74, p = 0.017), engaged in business (OR = 4.68, 95% CI: 1.66-13.21, p = 0.003) and those in their first trimester (OR = 3.35, 95% CI: 1.21-9.33, p = 0.02) were more likely to experience high fear of childbirth.

Conclusion: The study found that more than half of pregnant women reported high fear of childbirth and less than half had low fear. Factors significantly linked to this fear included maternal age, being a home maker, engaging in business and being in first trimester. Addressing this fear through targeted educational programs and counseling during early pregnancy is essential for improving maternal well-being and potentially reducing obstetric complications.

Keywords: Childbirth, fear, pregnant women

INTRODUCTION

Childbirth is a crucial and transformative experience in a woman's life which is marked by physical, emotional, and psychological changes.¹ One of the most intense events of life is giving birth to a child. Many women find the nine

months of pregnancy to be an exciting period and their emotions could range from happiness and optimism to anxieties and fear.² Pregnant and birthing women have mixed expectations and experiences; they feel excitement and faith,

but they also worry, fear, and endure anxiety. Fear of childbirth (FOC) is a frequent issue that affects women's health and wellbeing during and throughout pregnancy as well as after childbirth. Fear of giving birth affects a woman's connections with her husband, child, and family.³

Fear of birth which is also a mental issue can present as nightmares, physical complaints and trouble focusing on tasks like work or family activities.⁴ A severe fear of pregnancy and childbirth is known as tocophobia which may have long term effect.⁵

According to a 2016 systematic review and meta-analysis research, 14% of pregnant women globally have FOC, with 6–10% exhibiting severe FOC.⁶ In Europe overall prevalence of FOC was 11%, with primipara women having an incidence of 11.4% and multipara women having an incidence of 11%. This study discovered significant variations among the six European nations ranging from 4.5% in Belgium to 15.6% in Estonia for primiparous women and for multiparous women from 7.6% in Iceland to 15.2% in Sweden.⁷ In Australia overall prevalence of FOC was 24.0% and 31.0% of nulliparous and 18% of multiparous women reported high fear level⁸ whereas only 24.5% of women had severe degree fear of childbirth in Southern Ethiopia⁹ and 58.6% of pregnant women had high fear of childbirth in Kenya.¹⁰ In Asian countries like China and India 67.1%¹¹ and 45.4%¹² of women had FOC respectively.

Fear during pregnancy may have adverse effects on mother. Fear during the first trimester of pregnancy can cause fetal loss, while fear during the second and third trimesters can cause a drop in birth weight.¹³ Similarly, during labor, women with greater fear of childbirth had poorer obstetric outcomes, a greater chance of requiring a cesarean delivery,¹⁴ longer duration of labour,¹⁵ and use of epidural anesthesia during labour.¹⁶

Following childbirth the women may develop emotional disturbances leading to postnatal depression, posttraumatic stress disorder, avoiding further pregnancy or increased interval between pregnancies,¹⁷ ineffective relationship

between couples and parent baby bonding¹⁸, increased rate of admission to neonatal intensive care unit due to diseases, lower birth weight, and negative effects on the infant's emotional and social reactions.¹⁹

The causes of FOC include a variety of internal and external conditions like mental health issues (such as anxiety disorders) and past experiences with trauma and abuse. In addition, low social support, unemployment, and financial difficulties are the factors of developing FOC.²⁰

A study conducted among Swedish women reported that severe FOC women had higher antenatal visits, more sick days taken during pregnancy, longer stays in the maternity department, and at their request, an elective cesarean section was done. Compared to women with low FOC, handling severe FOC women was 38% greater cost.²¹

The above study exhibits fear of childbirth amongst the pregnant women around the globe and the significance of the study. However, limited studies were conducted regarding FOC in Nepal. Thus, the researcher intends/aims to explore and analyze fear of childbirth among pregnant women in a hospital at Kathmandu Nepal and suggests interventions to alleviate the sufferings of the pregnant women in order to improve the maternal mental health.

METHODS

Descriptive cross-sectional research design was carried out among pregnant women attending antenatal outpatient department of Paropakar Maternity and Womens Hospital, Thapathali Kathmandu. Sample size was determined by considering 45.4% prevalence of fear of childbirth from an Indian study.¹² Purposive sampling technique was used. Pregnant women at reproductive age from 18 – 49 years old irrespective of gestational age were included in the study and woman diagnosed with a psychiatric disorder were excluded. Structured interview questionnaire was developed on the basis of objectives, extensive review of literature and subject expert.^{12,22,23} The research instrument consists of two parts: Part I: 17 Questions related

to socio-demographic information and obstetric information. Part II: Questions related to fear of childbirth: It consists of 25 questions which was divided into three parts: (1) fear before childbirth- nine questions, (2) fear during childbirth- 10 questions and (3) fear after childbirth- six questions. The responses were scored on a 4 point Likert scale from 1 to 4 with the score ranging from 25 to 100. The mean score equal to 56.1 or lower considered low fear, and score higher than 56.1 indicating high level of fear. Validity was maintained by extensive literature review and suggestion of subject expert 3 from psychiatric nursing and 3 from women's Health. The questionnaires were developed in English and translated into Nepali by the researcher and language expert. Pretesting of research instrument was done in similar setting in 10 % of the total participants ie: 42 for understanding the practicability of instrument. The questionnaires were tested for reliability using Cronbach's alpha test ie 0.88.

The study was conducted after obtaining ethical approval and permission letter from Paropakar Maternity and women's hospital (1142). Oral and written consent was obtained from each participant using face to face interview technique.

The collected data was entered into Statistical Package for the Social Sciences (SPSS) version 23. The data was analyzed by using descriptive statistics such as frequency and percentage, mean, median, standard deviation, and range. Inferential statistics, bivariate logistic regression was used for finding factors of childbirth considering a 95% confidence interval.

RESULTS

A total of 418 antenatal women were included in the study. Median age of respondents was 27 years with quartile deviation of 4 and all respondents were married. Most of respondents (81.1%) followed Hinduism and more than half of respondents (55.3%) had studied up to secondary level. Majority of respondents (70.0%) were home maker. (Table 1)

More than half of the respondents (51.4%) were married at or before the age of 21, with a median

marriage age of 21 and a quartile deviation of 3. Half of the respondents (50.0%) were from third trimester. More the half of the respondents (55.0%) were multigravidae and less than half of the respondents (49.3%) were nulliparous. (Table 2).

More than half of the respondents (56.7%) reported high fear of childbirth, while 43.3% reported low fear. The mean level of fear was 56.1, with a standard deviation of 13.56, and scores ranged from 25 to 90 (Figure 1). Age and occupation of women were significantly associated with the level of fear of childbirth. Respondents aged more than 27 years were more likely to have high fear (OR = 0.61, 95% CI: 0.41-0.89, $p = 0.01$) as compared to women aged less than 27 years. Women engaged in business or other occupations had higher odds of experiencing high fear compared to farmers (OR = 4.68, 95% CI: 1.66-13.21, $p = 0.003$). Home makers also had increased odds of high fear compared to farmers (OR = 3.05, 95% CI: 1.22-7.74, $p = 0.017$) (Table 3). Women in their first trimester had higher odds of experiencing high fear compared to those in their third trimester (OR = 3.35, 95% CI: 1.21-9.33, $p = 0.02$) (Table 4).

Table 1: Socio Demographic Characteristics of Respondents (n= 418)

Variables	Frequency	Percentage
Age in completed years		
Less than or equal to twenty seven	217	51.9
Greater than twenty seven	201	48.1
Median=27, QD=4		
Marital status		
Married	418	100
Ethnicity		
Brahmin	148	35.4
Janajati	239	57.2
Dalit	5	1.2
Madhesi	24	5.7
Muslim	2	0.5
Religion		
Hinduism	339	81.1
Buddhism	60	14.4
Christianity	13	3.0
Islam	2	0.5
Kirat	4	1.0
Type of family		
Single	250	59.8
Joint	139	33.3
Extended	29	6.9
Educational level (women)		
Illiterate	12	2.9
Informal	25	6.0
Primary level	83	19.8
Secondary level	231	55.3
University degree	67	16.0
Educational level (Husband)		
Illiterate	7	1.7
Informal	20	4.8
Primary level	69	16.5
Secondary level	252	60.3
University degree	70	16.7
Occupation (women)		
Home maker	280	70.0
Farmer	23	5.5
Service	54	12.9
Business	61	14.6
Occupation (Husband)		
Unemployment	14	3.3
Farmer	37	8.9
Service	133	31.9
Business	172	41.1
Foreign employment	31	7.4
Artist	2	0.4
Driver	28	6.8
Daily wages	1	0.2
Monthly Family Income		
≤ 35000 (NPR)	225	53.8
> 35000(NPR)	193	46.2

Median=35000, QD=12500, Range: 10000-200000 (NPR)

Table 2: Obstetric Characteristics of Respondents (n =418)

Marriage Age		
Less than or equal to 21 years	215	51.4
More than 21 years	203	48.6
Median=21, QD=3, Minimum=12, Maximum=41		
Current gestational age		
First Trimester	24	5.7
Second Trimester	185	44.3
Third Trimester	209	50.0
Gravida		
Primigravidae	182	43.6
Multigravidae	230	55.0
Grand multigravidae	6	1.4
Parity		
Nulliparous	206	49.3
Primiparous	164	39.2
Multiparous	48	11.5
Abortion		
0	352	84.2
1	61	14.6
2 or more than 2	5	1.2
Number of living children		
0	215	51.4
1	173	41.4
More than or equal to 2	30	7.2
No. of still births		
0	409	97.8
1	9	2.2
Planned pregnancy		
No	101	24.2
Yes	317	75.8
First antenatal visits		
Below 16 weeks	374	89.5
17-24 weeks	40	9.6
≥ 25 weeks	4	0.9
Above 33weeks	-	-
Social support		
Yes	414	99.0
No	4	1.0
If yes n=414		
Husband	263	63.6
Husband, mother in law, father in law	147	35.6
Mother in law	2	0.4
Friends	2	0.4
Preferred Mode of delivery		
Vaginal delivery	355	84.9
Cesarean section	63	15.1

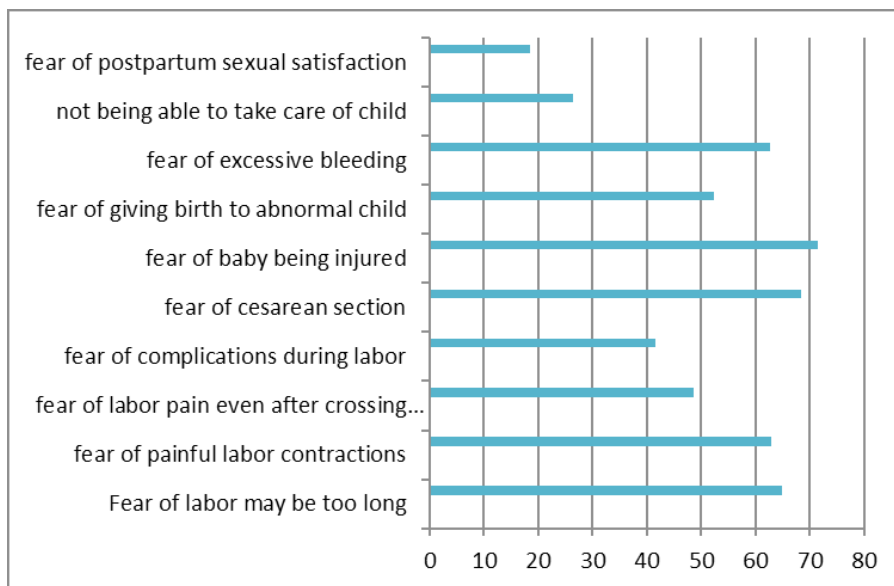


Figure 1: Fears regarding Childbirth

Table 3: Factors Associated with Fear of Childbirth among the Respondents (n=418)

Variables	Low Fear (Count, %)	High Fear (Count, %)	Chi-Square	Odds Ratio (95% CI)	p-value
Age					
≤ 27	81 (37.3%)	136 (62.7%)	6.56	0.61 (0.41-0.89)	0.01*
> 27	100 (49.8%)	101 (50.2%)			
Ethnicity					
Janajati	108 (45.2%)	131 (54.8%)	0.809	1.197 (0.81-1.77)	0.368
Others	73 (40.8%)	106 (59.2%)			
Type of family					
Single	103 (41.2%)	147 (58.8%)	1.119	0.808 (0.54-1.20)	0.29
Joint or Extended	78 (46.4%)	90 (53.6%)			
Educational level (women)					
Primary Level or More	49 (40.8%)	71 (59.2%)	0.418	0.868 (0.56-1.33)	0.518
Secondary Level or More	132 (44.3%)	166 (55.7%)			
Educational level (Husband)					
Primary Level or Less	39 (40.6%)	57 (59.4%)	0.364	0.87 (0.54-1.38)	0.547
Secondary Level or More	142 (44.1%)	180 (55.9%)			
Occupation (women)					
Farmer	16 (69.6%)	7 (30.4%)	9.43	3.05 (1.22-7.74)	0.017*
Homemaker	120 (42.9%)	160 (57.1%)			
Service	25 (46.3%)	29 (53.7%)			
Business and Others	20 (32.8%)	41 (67.2%)			
Occupation (husband)					
Farmer	20 (39.2%)	31 (60.8%)	0.94	1.13 (0.60-2.11)	0.703
Service	75 (46.0%)	88 (54.0%)			
Business	86 (42.2%)	118 (57.8%)			
Family Income					
≤ NPR 35000	90 (40.0%)	135 (60.0%)	2.16	0.75 (0.51-1.10)	0.141
> NPR 35000	91 (47.2%)	102 (52.8%)			

CI confidence Interval, * statistically significant association P< 0.05

Table 4: Factors Associated with Fear of Childbirth among the Respondents (n = 418)

Variables	Low Fear (Count, %)	High Fear (Count, %)	Chi-Square	Odds Ratio (95% CI)	p-value
Marriage age					
≤ 21 years	89 (41.4%)	126 (58.6%)	0.65	0.85 (0.58-1.25)	0.418
> 21 years	92 (45.3%)	111 (54.7%)			
Current gestational age					
First Trimester	5 (20.8%)	19 (79.2%)	6.129	1.21 (0.81 - 1.80)	0.346
Second Trimester	78 (42.2%)	107 (57.8%)			
Third Trimester	98 (46.9%)	111 (53.1%)			
Abortion					
Never	151 (42.9%)	201 (57.1%)	0.148	0.90 (0.53-1.53)	0.700
1 or more	30 (45.5%)	36 (54.5%)			
Number of children					
None	99 (40.4%)	146 (59.6%)	2.01	0.75 (0.51- 1.11)	0.156
1 or more	82 (47.4%)	91 (52.6%)			
First ANC visit					
Before 16 Weeks	165 (44.1%)	209 (55.9%)	0.964	1.382 (0.723, 2.639)	0.326
After 16 Weeks	16 (36.4%)	28 (63.6%)			
Social support					
Yes	179 (43.2%)	235 (56.8%)	0.074	0.762 (0.11-5.46)	0.786
No	2 (50.0%)	2 (50.0%)			
Mode of delivery					
Vaginal delivery	150 (42.3%)	205 (57.7%)	1.054	0.75 (0.44-1.29)	0.305
Cesarean section	31 (49.2%)	32 (50.8%)			

CI confidence Interval, * statistically significant association $P < 0.05$

DISCUSSION

The study was designed as a cross sectional study to assess fear of childbirth among pregnant women in hospital. Structured interview questionnaire was used to collect data. This section deals with discussion of major findings of the study.

In this study, median age of the respondents was 27 years while all were married. Ethnic distribution showed that 57.2% were Janajati, 81.1% followed Hinduism, and 59.8% had single family. Majority of respondents (70.0%) were home maker, 50.0% were from third trimester with 55.0% multigravida.

Most respondents reported that their pregnancy was planned (75.8%). Social support was nearly universal (99.0%), primarily from husbands (63.6%) or husbands along with in-laws (35.6%). Studies have shown that support from husband and family members lessens the stress during pregnancy and helps in building up self-confidence.²⁴

The preferred mode of delivery was overwhelmingly vaginal (84.9%), with a smaller portion opting for a cesarean section (15.1%) which is supported by study conducted in Ghana where 86.0% and 14.0% preferred vaginal delivery and CS respectively.²⁵ According to the World

Health Organization, unless there is a medically necessary indication there are no benefits of cesarean section for mothers or babies.²⁶

In this study, more than half of the respondents (56.7%) reported high fear of childbirth, while 43.3% reported low fear which is consistent to the study conducted in Egypt (55.33%)²⁷ and India (45.4%).¹² This finding is in contrast with the study conducted in Kathmandu Nepal (24.8%)²⁸ in 2022 among primiparous women. These discrepancies may be due to differences in tool used to measure the fear of childbirth. As in the later study standard tool was used which focused mainly on fear during labor mean while the present study used self-developed tool regarding numerous fears prior to, during, and following childbirth.

This study also examined the factors associated with fear of childbirth. Maternal age, occupation of women and gestation age were factors associated with fear of child birth. In present study advanced maternal aged women had high fear of child birth which is similar to study conducted in China.¹¹ This finding is in contrast to this study in Egypt²⁷ where young women below 20 years had intense fear of childbirth. This might be due to inexperience in taking care of child.²⁹

In this study, women who were engaged in business and home makes had high fear of childbirth which is inconsistent with the study conducted in Ethiopia.³⁰ The difference may be due to occupation category. Home makers might have experienced fear due to less frequent social interaction possibly due to isolation or fewer support systems. Women engaging in business may be related to the stress of balancing work and pregnancy or concerns about the impact on their business.³¹

In present study, women in first trimester had fear of child birth which is in contrast to the study conducted in Turkey where research was conducted among admitted pregnant women in hospital³² and in present study conducted among pregnant women attending antenatal outpatient department.

In first trimester women may experience fear of abortions, anemia and initial adjustment to pregnancy which is supported by study conducted in Pakistan.³³ So that prenatal education should be provided to pregnant women.³⁴

CONCLUSION

The study found that more than half of pregnant women reported high fear of childbirth. Factors significantly linked to this fear included maternal age, being a home maker, engaging in business and being in first trimester. Designing and applying educational workshops that cover childbirth preparation to help reduce fear through knowledge and preparation.

Conflict of Interest: No

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