

Fear and Experience of Childbirth among Primiparous Women

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ABSTRACT

Background: The fear of childbirth is the feeling of fearfulness, anxiety or worry among women in relation to pregnancy and childbirth process which influence their experience of childbirth which is the subjective feeling of sadness or joyfulness regarding childbirth. The main objective of the study was to identify the relationship between fear and experience of childbirth among primiparous women.

Methods: A descriptive cross-sectional study was done where non probability, purposive sampling technique was used to select a sample of 133 primiparous women attending Paropakar Maternity and Woman's Hospital having term pregnancy (37-42 weeks of gestation) without any complications and willing to participate in the study. Data were collected through interview technique. Fear of childbirth was assessed by using standard Wijma Delivery Expectancy/ Experience Questionnaire (WDEQ) and experience of childbirth was assessed by using Childbirth Experiences Questionnaire (CEQ). Data analysis was done by using descriptive statistics like frequency, mean, percentage and standard deviation and inferential statistics i.e. Pearson's correlation and chi square test in Statistical Package for Social Sciences version 16.

Results: The study revealed that fear and experience of childbirth were negatively correlated ($r = -0.254$). The majority of the respondents (64.7%) had a moderate level of fear of childbirth. Most of the respondents (80.5%) had a positive experience of childbirth.

Conclusions: This study concludes that there is negative relationship between the fear of childbirth and its experience. Women having higher fear of childbirth have less positive experience of childbirth.

Keywords: Childbirth; experience of childbirth; fear of childbirth; mode of delivery.

INTRODUCTION

The fear of childbirth is one of the most emotional causes that impact on childbirth experiences which influences daily life activities and woman's confidence in coping with birth process.¹ Fear of childbirth may be due to many causes such as worries from labour process, previous negative birth experiences, fear of pain, fear of operative delivery, birth injuries to themselves and their baby.^{2,3}

Women's childbirth experience depends on both obstetric variables (mode of delivery, interventions used during delivery) and psychological variables (stress, anxiety or fear of childbirth).⁴

The literatures show that fear of childbirth is of importance as it can worsen the health of the pregnant woman and generate complications during pregnancy, childbirth and postpartum period.⁵ It is an important factor strongly associated with negative childbirth experience.^{6,7} It may also contribute to a longer duration of labor and increased emergency caesarean section.⁷ Thus, this study aimed to identify the relationship between fear and experience of childbirth among primiparous women and also the association of fear with duration of labor and mode of delivery.

METHODS

The study was carried out by using descriptive cross-sectional design to examine the relationship between fear

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of childbirth and experience of childbirth and identify whether a change in one results change in another. The study was conducted in Paropakar Maternity and Women's hospital (PMWH) from 4th to 30th April, 2021 (2077/12/22 to 2078/01/17) for the period of 4 weeks. The ethical approval of the research proposal was obtained by Institutional Review Committee (IRC) of Nepalese Army Institute of Health Sciences (NAIHS) and PMWH.

The respondents for the study were selected based on the inclusion criteria and were informed about the study. Written informed consent was obtained from each of the respondents prior to data collection. Confidentiality was maintained in data collection procedure by assuring them that their names will not be revealed and the given information will be used only for research purpose.

The Inclusion criteria were primiparous woman of 18-35 years of age with term pregnancy (37-42 weeks of gestation) without any complications and willing to participate in this study. The exclusion criteria were multiparous women, women having high risk pregnancy and women admitted for elective caesarean section delivery.

The required sample size was calculated by using Yamane formula, i.e. $n = N / (1 + N d^2)$ where, n is sample size, N is the known population of the study area and d is allowable error.⁸ Assuming the total primiparous deliveries in PMWH per month 900 and allowable error 8%, sample size was calculated to be 133. Non probability, purposive sampling method was used to select respondents from the primiparous women who met the criteria of the study and were willing to participate in the study.

The data related to socio-demographic information and fear of childbirth was collected from women who were not in labour or during the latent phase of labour after being admitted in antenatal ward through interview technique by using semi structured interview schedule. Information of experience of childbirth, duration of labor and mode of delivery was collected from the same respondents in postnatal ward after six hours of delivery and prior to discharge from the hospital. Data on fear of childbirth was collected by using standard Wijma Delivery Expectancy/ Experience Questionnaire (WDEQ) consisting of 33 items⁹ and experience of childbirth was assessed by using Childbirth Experiences Questionnaire (CEQ) consisting 23 items.¹⁰

Statistical analysis was done by using descriptive statistics like frequency, mean, percentage and standard deviation and inferential statistics i.e. Pearson's correlation and chi square test. The correlation between fear and

experience of childbirth was analyzed by using Pearson's correlation. Association of level of fear with socio-demographic variables was measured by chi square test. The association of level of fear with duration of labor and mode of delivery was also measured by chi square test. Statistical significance was considered at p-value < 0.05 and highly statistical significance was considered at p-value < 0.01. The data were analyzed in Statistical Package for the Social Sciences (SPSS) version 16.

RESULTS

A total of 133 respondents participated in the study. The majority of respondents (76.7%) were in the age group 18 to 25 years with the mean age 23.03 + 3.70. The majority of respondents (61.7%) belonged to Janajati. All of the respondents were literate and among them, the majority (61.7%) had completed secondary level education. The majority of respondents (71.4%) were house manager. Fifty six percent of respondents had a monthly income of more than Rs.30,000/-. Most of the respondents (78.9%) did not have any information regarding labour and childbirth. (Table 1)

Table 1. Respondents' socio-demographic variables and information regarding labour and childbirth, n=133

Variables	Number	Percentage
Age		
18-25 years	102	76.7
26-35 years	31	23.3
Ethnicity		
Janajati	82	61.7
Brahman/ Chhetri, Dalit, Others	51	38.3
Education level		
Basic (1 -8 class)	31	23.3
Secondary (9 - 12 class)	82	61.7
Higher (Bachelor and above)	20	15.0
Employment status		
House manager	95	71.4
Others	38	28.6
Socio-economic status (Monthly income of Family)		
Rs. 20,000/- or below	43	32.3
Rs. 21,000 - Rs. 30,000/-	34	25.6
Above Rs. 30,000/-	56	42.1
Information regarding labour and childbirth (n=133)		
Yes	28	21.1
No	105	78.9

* Mean age = 23.03 + 3.70

* Monthly income of family; Median = Rs. 27,912/-, Q1= Rs. 15,465/- and Q3= Rs. 47,750/-.

Table 2. Respondents' fear and experience of childbirth. n=133

Variables	Number	Percentage	Mean and standard deviation
Level of Fear of Childbirth			
Mild fear (score 0 - 37)	18	13.5	53.16 + 16.805
Moderate fear (score 38 - 65)	86	64.7	
Intense fear (score 66 - 84)	26	19.5	
Clinical fear (score 85 - 165)	3	2.3	
Experience of Childbirth			
Negative (score 23 - 57)	26	19.5	63.96 + 7.243
Positive (score 58 - 92)	107	80.5	

*Fear of Childbirth (FOC) score ranges from 0 - 165.

*Experience of Childbirth (EOC) score ranges from 23 - 92.

Table 3. Correlation between respondents' fear of childbirth and experience of childbirth. n=133

		Experience of Childbirth	p-value
Fear of Childbirth	Correlation coefficient	-0.254	0.003*

* Highly statistically significant (p-value < 0.01).

Table 4. Association of respondents' level of fear of childbirth with socio-demographic variables.

Demographic Variables	Level of Fear of Childbirth		Chi square value	p-value
	Mild to Moderate (n=104) No. (%)	Intense to Clinical (n=29) No. (%)		
Age group			0.380	0.538
18-25 years	81 (77.9)	21 (72.4)		
26-35 years	23 (22.1)	8 (27.6)		
Ethnicity			0.144	0.705
Janajati	65 (62.5)	17 (58.6)		
Dalit, Brahmin/ Chhetri, others	39 (37.5)	12 (41.4)		
Education level			2.591	0.107
Basic level	21 (20.2)	10 (34.5)		
Secondary or Higher level	83 (79.8)	19 (65.5)		
Employment status			2.333	0.127
House manager	71 (68.3)	24 (82.8)		
Others	33 (31.7)	5 (17.2)		
Socio-economic status (Monthly income of family)			7.450	0.024*
Rs. 20,000/- or below	37 (35.6)	6 (20.7)		
Rs. 21,000- Rs. 30,000/-	21 (20.2)	13 (44.8)		
More than Rs. 30,000/-	46 (44.2)	10 (34.5)		
Information regarding labour and childbirth			0.003	0.957
Yes	22 (21.2)	6 (20.7)		
No	82 (78.8)	23 (79.3)		

*Statistically significant (p-value < 0.05).

Table 5. Association of respondents' level of fear of childbirth with mode of delivery and duration of labour in vaginal delivery.

Variables	Level of Fear of Childbirth		Chi square value	p-value
	Mild to Moderate No. (%)	Intense to Clinical No. (%)		
Mode of delivery (n=133)				
Vaginal delivery	68 (65.4)	19 (65.5)	0.000	0.989
Emergency caesarean section	36 (34.6)	10 (34.5)		
Duration of labour in vaginal delivery (n=87)				
Normal duration (up to 12 hours)	34 (50.0)	2 (10.5)	9.539	0.002*
Prolonged duration (> 12 hours)	34 (50.0)	17 (89.5)		

*Statistically significant (p-value < 0.05).

Majority (64.7%) had a moderate level of fear of childbirth with the mean and standard deviation of 53.16 + 16.805. Most of the respondents (80.5%) had a positive experience of childbirth with a mean and standard deviation of 63.96 + 7.243. (Table 2) The correlation between Fear of Childbirth and Experience of Childbirth was negative correlation ($r = -0.254$). (Table 3)

Higher proportion of respondents having mild to moderate fear of childbirth were from the 18 - 25 years age group, belonged to Janajati ethnicity, completed a secondary or higher level of education, were house manager and did not have any information regarding labour and childbirth. Among respondents having mild to moderate fear of childbirth, 44.23% of them had an average monthly family income of more than Rs. 30,000/- and among respondents having intense to clinical fear of childbirth, 44.83% had a monthly income of Rs. 21,000/- to Rs. 30,000/- on average. The result shows no statistical significant association between the level of fear of childbirth and socio-demographic variables except monthly income of the family (p-value 0.024). (Table 4)

The proportion of vaginal delivery and emergency caesarean section were similar among the respondents having mild to moderate and intense to clinical fear of childbirth which shows no statistical significant association (p-value 0.989) between the level of fear of childbirth and mode of delivery. The association between the level of fear of childbirth and the duration of labour in vaginal delivery was statistically significant (p-value 0.002). (Table 5)

DISCUSSION

The mean age of the respondents was 23.03 + 3.70 with the majority (76.7%) in the age group 18 - 25 years. The

majority of respondents belonged to Janajati (61.7%), had completed secondary level education (61.7%) and were house manager (71.4%).

This study found that the fear of childbirth and experience of childbirth are negatively correlated ($r = -0.254$, p-value 0.003; $p < 0.01$). This finding is very close to that of the previous studies which found negative correlation between fear of childbirth and experience of childbirth ($r = -0.267$),¹¹ negative experience of childbirth was significantly predicted by fear of childbirth,⁴ women with severe fear of childbirth had a higher prevalence of a negative experience of childbirth⁶ and fear of childbirth pre-partum was negatively correlated with the subjective experience of delivery.¹² That is, the higher fear, the greater were the chances of a more negative subjective experience of childbirth. Although the measures of birth experience differed in content among these studies, the results were similar. Similarly, a study conducted in Japan using WDEQ-A for antenatal fear of childbirth and WDEQ-B for postnatal fear of childbirth found the positive correlation between them.¹³ The study identified the postnatal fear of childbirth as negative experience of childbirth which supports the present study.

The majority of the respondents (64.7%) had a moderate level of fear of childbirth (WDEQ score 38 - 65) and the mean score of fear of childbirth was 53.16 + 16.805. In line with the findings of this study, a study conducted in Thailand indicated the moderate level of fear in the majority of the women (64.9%) with the mean W-DEQ score of 51.9 ± 14.3 .¹⁴ Similarly, a study in Portugal also reported a moderate level of fear in the majority (60.2%) of its study population.¹⁵ But the other study conducted in Nepal showed only one fourth (24.8%) of study participants had moderate level of fear of childbirth.¹⁶ This difference might be due to difference in the duration of pregnancy at the

time of assessment of fear of childbirth which in this study was second trimester and also dissimilarity in sample size.

The positive experience of childbirth was reported by most (80.5%) of the respondents in this study. This finding is consistent with a study conducted in Rwanda which reported the majority (77.5%) of study participants had an overall good experience of childbirth.¹⁷ The negative experience of childbirth was reported by 19.5% of the respondents in this study. This finding is similar to a study conducted in Norway which found the negative experience of childbirth in 21.1% of the participants.⁶

This study found no statistically significant association of level of fear of childbirth with the demographic characteristics such as age group, ethnicity, education level and employment status of respondents. Similar to this finding, previous studies found that fear of childbirth was not associated with age,^{15,18} education level^{15,18,19} and occupation.¹⁹

This study found that the association of level of fear of childbirth was statistically significant with the monthly income of the family. This finding is in agreement with previous studies which found women with high to severe fear of childbirth were significantly less likely to have adequate income.^{14,20}

Information regarding labour and childbirth was also found to have no statistically significant association with the level of fear of childbirth in this study. Contrary to this finding, the previous studies reported that women who did not have information about labour and childbirth showed higher levels of fear of childbirth.^{14,15} This difference may be due to the dissimilarity in the sample size and awareness regarding labour and childbirth process among the study population.

Regarding the mode of delivery, this study found no statistically significant association between the level of fear of childbirth and the mode of delivery (p-value 0.989). This finding agrees with other studies conducted in Pennsylvania and Kenya.^{5,21} However, there are some contradictory shreds of evidence to this finding. A study conducted in Finland found that attempted vaginal deliveries of women with fear of childbirth more often ended with an emergency caesarean section.²² The disparity among these studies may be because of differences in sample size. The indication for caesarean section in different countries may be varied which might as well influence the study findings.

This study found the association of fear of childbirth with

the duration of labour (p-value 0.002). This finding is in congruence with the studies conducted in Norway and Sweden where the mean labour duration was found longer in women with fear of childbirth compared with women without fear of childbirth.^{6,23}

Since this is a single centre study, the findings may not represent the entire population to set definitive conclusions and recommendations.

CONCLUSIONS

Fear of childbirth tends to be common among primiparous women and most of the women seem to have a positive experience of childbirth. There is negative relationship between fear of childbirth and experience of childbirth. Women having higher fear of childbirth are likely to have less positive experience of childbirth. Women having fear of childbirth may have prolonged duration of labour.

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CONFLICT OF INTEREST

There are no conflicts of interest.

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