



A STUDY TO ASSESS THE LEVEL OF ANXIETY RELATED TO CHILDBIRTH AMONG PRIMI ANTENATAL WOMEN IN SELECTED HOSPITALS, BANGALORE

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ABSTRACT

The present study has been conducted with the aim of assessing the level of anxiety related to childbirth among Primi antenatal women in selected Hospitals, Bangalore. A Quantitative approach was adopted for the study. The research design chosen for the study was descriptive. 30 Primi antenatal women who were on the first trimester of pregnancy and who met the inclusion criteria in selected hospitals, Bangalore were selected through convenient sampling. Wijma Delivery Expectancy Questionnaire (W-DEQ Version-A) was used to assess the level of anxiety related to childbirth. Descriptive statistics were used to present the findings of the study. 53% of the samples had Mild fear of childbirth in first trimester and 20% had severe fear of childbirth in second trimester. But in the third trimester majority of Primi antenatal women (i.e.) 73% had clinical fear of childbirth, 17% had severe fear of childbirth and 7% had moderate fear of childbirth. Throughout the course of pregnancy, higher level of anxiety related to childbirth was reported during their third trimester of pregnancy. Anxiety associated with childbirth has serious consequences. Findings suggest the need of the training programme of mind body interventions as an intervention for Primi antenatal women to reduce the anxiety related to childbirth and prevent its consequences.

KEYWORDS: *Anxiety, Primi Antenatal Women, Childbirth, Trimesters*



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INTRODUCTION

Pregnancy is the time during which one or more offspring develops inside a woman. It usually lasts around 40 weeks from the LMP and ends in Childbirth.¹ Pregnancy is a wonderful period in a woman's life and she spends each and every day in pleasant anticipation, waiting to hold her bundle of joy in her arms.² Even though it is a time of great happiness and fulfillment of the life, pregnancy causes a lot of mental conflicts and feelings which is a natural trend of this period. However, in some women these feelings are more intense and lead them to childbirth anxiety.³ The transition to motherhood is a period of developmental challenge involving substantial changes and adjustments both physiologically and psychologically.⁴ Prevalence of high anxiety disorder in pregnant women was found to be undiagnosed and untreated.⁵ Anxiety as part of human life is considered to be an adaptive response and is a state that every man experiences as a result of pressure or stress, and leads to the appearance of warning and destructive symptoms.⁶ Fear of childbirth complicates somewhat 20% of pregnancies in developed countries where it is mostly evaluated. It is expressed as being severe by six to ten percent of parturient and is manifested as nightmares, physical complaints and difficulties to concentrate on work or on family activities.⁷ Childbirth is a significant physiological, social and emotional event in the life of a woman and her family. Although inherently unpredictable the experience of childbirth should be life affirming and associated with minimal risk of an adverse outcome for women living in developed countries: One in five pregnant women would experience moderate fear of Childbirth, and 6% to 13% of the pregnant women would experience severe and disabling fear of childbirth.⁸ Childbirth fears and anxiety is unique to woman. About 20% of low risk pregnancies in western countries reported intense childbirth fear and 6% to 10% are seriously incapacitated by childbirth fear.⁹ An analytical cross sectional study among the third trimester pregnant women in Spain revealed that their anxiety levels were higher.¹⁰ A prospective study among third trimester pregnant women in Iran revealed that nulliparous women reported higher level of anxiety in 28th and 38th weeks of gestation than multiparous women.¹¹ Anxiety during third trimester is more concerned with childbirth. Few researchers believe that level of anxiety is only high in third trimester and reported not much differences between the first and second trimester, some also have reported that more anxiety in the second and third trimester.¹² Poor outcomes of pregnancy are associated with anxiety. Woman in labour feels anxiety, tension or fear, the 'stress hormones' (catecholamine's, including adrenaline) rise and stop the release of oxytocin.¹³ Pharmacologically, epinephrine has been associated with enervating uterine contractility and norepinephrine with intensifying uterine contractility. Prolonged second stage of labor has been observed in women with higher catecholamine concentrations.¹⁴ Evidences showed that anxiety not only affects the maternal health but have impact on labour outcomes such as spontaneous preterm labour, low APGAR Score, prolonged Labour, fetal distress, caesarean birth, low birth weight baby, breast feeding difficulties are more common conditions

related to maternal anxiety. Many studies reported that the high preference for caesarean section was associated with fear of childbirth.¹⁵ Mental health of the pregnant women is very important as like physical health of them. Fear of childbirth has gained growing attention. Fear of childbirth seems to be an increasingly important issue in obstetric care. It has been estimated that 6–10% of all pregnant women experience severe fear of childbirth.¹⁶ This fear may overshadow the entire pregnancy, complicate labor. Fear of childbirth may complicate communication between the woman and the maternity staff, and poor communication may complicate clinical decisions and delay obstetric interventions. Hence, fear of childbirth is an important women's health issue the present study was conducted to assess the level of anxiety regarding childbirth among antenatal women across the trimesters which in turn would help in designing and implementing the appropriate strategies for reduction of anxiety related to childbirth and satisfactory labour outcomes.

MATERIALS AND METHODS

The main objective of this study is to assess the level of anxiety related to childbirth among antenatal women. A non experimental – quantitative approach was adopted for this study. The research design chosen for the study was descriptive design. Samples were Primi antenatal women who were on the first trimester of pregnancy were considered as target population. Accessible populations were Primi antenatal women who were on the first trimester of pregnancy and attending antenatal clinic in selected hospitals, Bangalore. High risk pregnancies were excluded. Antenatal women who met the inclusion criteria were selected through convenient sampling to the study. Sample Size was 3. In present study the researcher had constructed a structured baseline variables in Section-A with 10 items like age, religion, education, occupation, income etc. In Section-B the anxiety of childbirth was assessed by Wijma Delivery Expectancy Questionnaire (WED-Q Version-A). The W-DEQ (version A) measures the anxiety of childbirth. The rating scale which consists of 33-items has the score ranging from 0 to 5 per item, i.e., 'Not at all' to 'extremely' with a minimum score of 0 and a maximum score of 165. The higher the score, the greater the anxiety of childbirth manifested. Validity and reliability was obtained for the tool. The study was conducted after the approval of Institutional Ethical Committee (010/01/2015/IEC/SU) in Saveetha University, Chennai. Purpose of the research study was explained to all the participants. An informed written consent was obtained from each participant before the data collection. Then they were asked to self rate their level of anxiety related to childbirth. Each rating score meaning was explained. The selected antenatal women were followed up in the second and third trimesters during their regular antenatal checkup and the subsequent data were assessed by using the same tool. Primi Antenatal women were assessed for 3 times i.e. first assessed in the first trimester, second and third times in their respective trimesters. The data were analyzed using SPSS package 21Version.

RESULTS

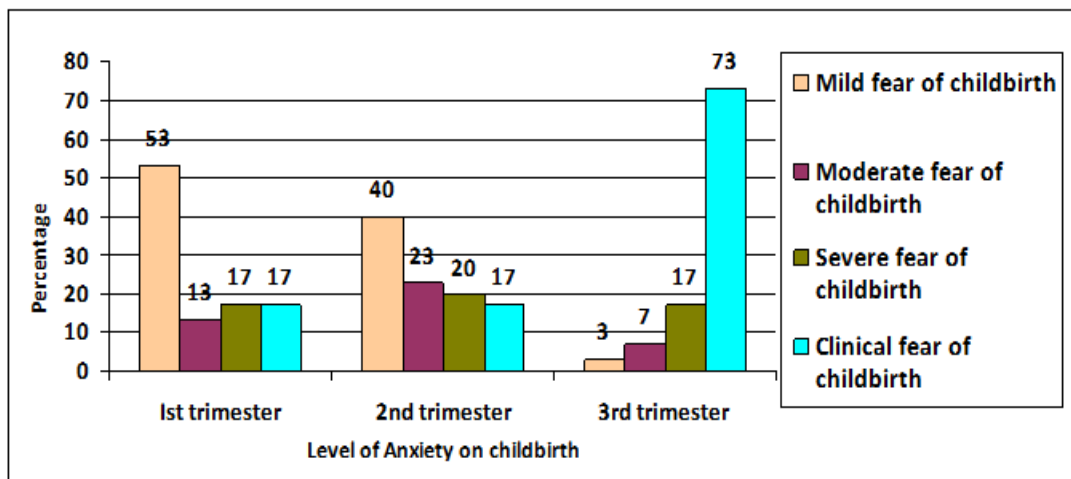
Table 1

Frequency and Percentage distribution of Baseline Variables of Primi Antenatal women

n=30			
PART -A			
S.N	Demographic Variables:	Frequency	Percentage
1.	Age in Years		
	a. 18-23 Years	18	60
	b. 24-29 Years	10	33
	c. 30 and 35 Years	2	7
	d. 36 and above Years	-	-
2.	Religion		
	a. Hindu	16	53
	b. Muslim	9	30
	c. Christian	5	17
	d. Any other	-	-
3.	Marital Status		
	a. Married	30	100
	b. Divorced	-	-
	c. Separated	-	-
	d. Widow	-	-
	e. Unmarried	-	-
4.	Educational Level		
	a. Professional or Honors	2	7
	b. Graduate or Post-Graduate	4	13
	c. High-School Diploma	5	17
	d. High School Certificate	9	30
	e. Middle School Certificate	4	13
	f. Primary School or Literate	6	20
	g. Illiterate	-	-
5.	Occupation of the Mother		
	a. Profession	1	3
	b. Semi-Profession	6	20
	c. Clerical, Shop-owner	2	7
	d. Skilled worker	9	30
	e. Semi-skilled worker	4	13
	f. Unskilled worker	-	-
	g. Unemployed	8	27
6.	Estimated Annual Income		
	a. \geq 36017	30	100
	b. 18000-36016	-	-
	c. 13495-17999	-	-
	d. 8989-13494	-	-
	e. 5387-8988	-	-
	f. 1803-5386	-	-
	g. less than or equal 1802	-	-
7.	Place of Residence		
	a. Urban	9	30
	b. Sub urban	16	53
	c. Rural	85	17
8.	Type of Family		
	a. Nuclear	12	40
	b. Joint	18	60
9.	Family History of Mental Illness		
	a. Yes	-	-
	b. No	30	100
	If Yes Specify -----		
10.	Have you ever been diagnosed with Mental Illness		
	a. Yes	-	-
	b. No	30	100
	If Yes Specify -----		

Table 1 shows that the 60% of Primi antenatal women were in the age group of 18-23 Years, 53% were belonged to Hindu religion, 30% were completed their high school and 27% were unemployed. In regard to

place of residence 53% of samples were Sub Urban. Among them majority (60%) were belonged to joint family, 100% samples had no history of mental illness. 70% of samples were more than 6weeks of gestation.



Graph 1
Level of Anxiety related to childbirth among Primi Antenatal women

Figure 1 shows that 53% of the samples had Mild fear of childbirth in first trimester and 20% had severe fear of childbirth in second trimester. But in the third trimester

majority of Primi antenatal women (i.e.) 73% had Clinical fear of childbirth, 17% had severe fear of childbirth and 7% had Moderate fear of childbirth.

Table 2

Distribution of Anxiety level related to childbirth based on mean, standard deviation across trimesters of pregnancy

n=30

Level of anxiety/ fear	I Trimester		II Trimester		III Trimester		Minimum score	Maximum score	Mean	Std. Deviation
	f	%	f	%	f	%				
Mild fear of childbirth	16	53	12	40	1	3	1	16	9.66	7.76
Moderate fear of childbirth	4	13	7	23	2	7	2	7	4.33	2.51
Severe fear of childbirth	5	17	6	20	5	17	5	6	5.33	0.57
Clinical fear of childbirth	5	17	5	17	22	73	5	22	10.66	9.81

The above table 2 depicts that highest sample i.e. 16 (53%) were reported mild fear of childbirth during their first trimester. In Second trimester, 12 (40%) samples had mild fear of childbirth, 7 (23%) samples had moderate fear of childbirth, 6 (20%) samples had severe fear of childbirth and 5 (17%) samples had Clinical fear

of childbirth. Almost all samples (97%) of primi antenatal women at third trimester had moderate to clinical fear of childbirth. The mean scores also varied with high mean score of 10.66 and 9.81 standard deviation in third trimester.

DISCUSSIONS

Many studies were focused on Antenatal women’s health. Relatively little attention has been paid to antenatal mental health problems specifically antenatal anxiety related to childbirth. The present study was aimed to determine the level of anxiety related to childbirth which in turn would help in designing and implementing appropriate strategies for reduction of anxiety and its adverse labour outcomes. The current study revealed that (97%) of primi antenatal women at third trimester had moderate to clinical fear of childbirth. The mean scores also varied with high mean score of 10.66 and 9.81 standard deviation in third trimester. Our studies compare well with another research findings of Lynn. The results revealed that highest prevalence of severe childbirth anxiety was reported during third trimester of pregnancy¹⁷. The research findings also consistent with Alipour.et.al . research. The results

revealed that Mean scores of fear of childbirth in anxious women were significantly more than non-anxious women with state anxiety and trait anxiety at gestational age of week 28th (p< 0.01) and (p< 0.001) respectively. In addition, mean scores of fear of childbirth in anxious women were significantly more than non-anxious women with state anxiety and trait anxiety at gestational age of week 38th (p< 0.01) and (p< 0.001) respectively. Logistic regression analysis showed that state and trait anxiety at gestational age of week 28th increased the risk of fear of childbirth (odds ratio [OR] 2.7, 95% confidence interval [CI] 1.69-4.35) (p= 0.03) ([OR] 2.8, 95% [CI] 1.17-6.80) (p=0.02) respectively. It also indicated that state and trait anxiety increased the risk of fear of childbirth at gestational age of week 38th ([OR] 2.7, 95% [CI] 1.03-6.80) and ([OR] 5.4, 95% [CI] 1.75-16.76) (p=0.04) (p=0.003) respectively¹⁸. The present study results were supported by research findings of Szeverenyi. Findings showed that more than 80% of the low risk pregnant women experienced fear of

childbirth during their third trimester of pregnancy¹⁹. Findings of this study agree with the earlier study of Madhavanprabhakaran. Study reported that 93% had severe childbirth anxiety during third trimester. During first trimester 42.4% pregnant women also reported severe childbirth anxiety. The mean scores were also varied with high mean score of 38.70 in third trimesters²⁰.

CONCLUSIONS

Anxiety related to childbirth is very common among Primi Antenatal women. The present findings showed that there was higher level of anxiety related to childbirth during the third trimester of pregnancy. Fear of childbirth have serious consequences and also causes negative perceptions of labor which in turns of maternal request

REFERENCES

1. Pregnancy [Internet]. Pregnancy from Wikipedia, the free encyclopedia; 2016[updated 2016 Dec 27; cited 2016 Dec 29] Available from: <https://en.wikipedia.org/wiki/Pregnancy>
2. Healthizen. Pregnancy center [Internet]. Healthizen ; 2009 [updated 2010 Oct. 18 ; Cited 2014 Mar. 22] Available from: <http://www.healthizen.com/pregnancy/index.aspx>.
3. Sadock B, Sadock V, Kaplan.H, Synopsis of Psychiatry behavioral science.2010, 10th edition; 150-151
4. Kessler R., Keller M and Wittchen H, The epidemiology of generalizes anxiety disorder 2001;24(1) 19-39
5. Hodnett ED. Pain and women's satisfaction with the experience of childbirth: a systematic review. Am. J. Obstet. Gynecol. 2002;186,160-172
6. J.M.Catov,D.J.Abatemarco,N.Markovic, J.M.Roberts ,Anxiety associated with gestational age at birth and fetal growth. Maternal and Child Health Journal, 2010;14(5):758-764
7. Areskog B, Uddenberg N, Kjessler B. Fear of childbirth in late pregnancy. Gynecol Obstet Invest 1981; 12: 262-266
8. Poikkeus P, Saisto T, Unkila-Kallio L, Punamaki RL, Repokari L, Vilska S, et al. Fear of childbirth and pregnancy-related anxiety in women conceiving with assisted reproduction Obstetrics and Gynecology. 2006; 108(1):70-76
9. Saisto T, Halmesmäki E. Fear of childbirth: A neglected dilemma. Acta Obstet Gynecol 2003; 82:201-208
10. García Rico MA, Rodríguez AJM, Díez SMU,Real MCM, Analysis of the relationship between maternal anxiety and pregnancy. Progresos de Obstetriciay Ginecología 2010;53, 273-279.
11. Alipour Z, Lamyian M, Hajizadeh E(2012) Anxiety and fear ofchildbirth as predictors of postnatal depression in nulliparous women. Women Birth.2011: 25, e37-43.
12. Lee AM et.al, Prevalence, Couand risk factors for antenatal anxiety and depression. Obstetrics Gyn. 2007; 110(5):1102-1112
13. Hormones in labour NCT center [Internet]. [Cited 2015 Sep. 26] Available from <https://www.nct.org.uk/birth/hormones-labour>
14. Bakshi R, Mehta A, Mehta A, Sharma B. Tokophobia: Fear of Pregnancy and Childbirth. The Internet Journal of Gynecology and Obstetrics. 2007; 10(1) Available from: <http://www.ispub.com/journal/>
15. Qiao Y,Wang J,Li J,Wang J. Effects of depressive and anxiety symptoms during pregnancy on pregnant,obstetrics and neonatal outcomes: Journal of Obstetrics and Gynecology 2012;32(3):237-240
16. Saisto T, Ylikorkala O, Halmesmaki E. Factors associated with fear of delivery in second pregnancies. Obstet Gynecol. 1999; 94:679-82.
17. Lynn FA, Alderdice FA, Crealey GE, McElnay JC. Associations between maternal characteristics and pregnancy-related stress among low-risk mothers, Int. J. Nurs. Stud. 2011;48(1):620-627
18. Zahra Alipour, Minoor Lamyian, Ebrahim Haizadeh, and Maryam Agular Vafaei The association between antenatal anxiety and fear of childbirth in nulliparous women. Iranian journal of Nursing and midwifery Research, 2011; 16(2): 169-173.
19. Szeverenyi P, Poka R, Hetey M, Torok Z Contents of childbirth related fear. Journal - Psychosom Obstetrics Gynecology 1998;19(1):38-43
20. Madhavanprabhakaran, Karkada Subrahmanya Nairy,Melba Sheila D'Souza, Prevalence of pregnancy anxiety and associated factors. Int. J. of Africa Nursing sciences,2015;3(1):1-7.

for caesarean section. To reduce the anxiety related to childbirth especially in third trimester and to prevent its consequences is the utmost important. Therefore to reduce the fear of childbirth authors recommend some relaxation techniques which should be trained by midwives as a part of antenatal care.

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CONFLICT OF INTEREST

Conflict of interest declared none.

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