

## IMPACT OF PREVIOUS BIRTH EXPERIENCE ON MATERNAL FEAR OF CHILDBIRTH

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Received date: 24 August 2021

Revised date: 14 September 2021

Accepted date: 04 October 2021

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### ABSTRACT

**Background:** Fear of childbirth is an important women's health concern. A negative birth experience has negative effects on mental health, and lead to fear of a subsequent birth. The aim of study is to determine the frequency of severe maternal fear of childbirth in current pregnancy with previous negative birth experience. **Methodology:** This is a cross sectional study was conducted between Jan2020 to July 2020 at Gynecology & Obstetrics Unit; Abbasi Shaheed Hospital Karachi. Total 153 pregnant women between 20-40 years after 32 weeks with negative birth experience were included. The wijma delivery experience questionnaire was used to assess the level of fear. Demographic data was presented as frequency and percentages. Effect modifiers were controlled through stratification to see the effect of these on maternal fear of child birth with p-value of  $\leq 0.05$  as significant. **Results:** The mean age of the women was  $30.10 \pm 4.10$  years. Mean gestational age was 35.69 weeks with  $SD \pm 2.06$ . Out of 153 patients, 26.1% of the women reported severe fear of delivery, a score of  $\geq 85$  on the Wijma Delivery Expectancy Questionnaire and 73.9% had no maternal fear. **Conclusion:** A negative birth experience has negative effects on mental health, and lead to fear of a subsequent birth. Early identification of subjectively negative birth experiences by healthcare professionals may prevent severe fear in future pregnancies.

**KEYWORDS:** Maternal fear of childbirth, negative birth experience and W-DEQ score, Pregnancy.

### INTRODUCTION

The impact of previous childbirth experiences on maternal fear of childbirth is very common in the world. Clinically significant fear of childbirth is estimated to affect 20-25% of pregnant women. The prevalence of severe fear that impact on daily life is thought to be between 6 to 10%.<sup>[1]</sup> Numerous factors have been associated with increased prevalence of fear of childbirth including young maternal age, nulliparity, preexisting psychological problems, lack of social support and previous adverse obstetric events.<sup>[2]</sup>

The most of studies have shown a strong association between emergency caesarean section, instrumental delivery, unbearable pain, and fear of childbirth in subsequent pregnancies.<sup>[3]</sup> The negative experiences increases risk for maternal postpartum depression and may negatively affect attitudes to future pregnancy and birth, and may prompt women to request caesarean section.<sup>[4]</sup> Women with a previous caesarean section

might have more often fear of childbirth and have increased risk of complicated labour<sup>[5]</sup>

It is important to detect maternal fear during pregnancy as it may have deleterious effect outcome of pregnancy. Antenatal stress and anxiety has been associated with preterm and post term delivery, fetal growth restriction and low birth weight. Women with antenatal fear of childbirth have been found to have an increased risk of dissatisfaction with their birth experiences. Fear of pain is associated with more pain and distress during labour. Women suffering from fear during pregnancy are also at increased risk of emotional balance after childbirth, and impaired bonding with the child.<sup>[6]</sup>

Midwives and doctors are in unique positions to develop a trusting insightful relationship with the women they encounter. In being aware of women's fear, in particular, midwives and doctors then must be sensitive to anxieties which can be approached with reassurance, information and one to one support.<sup>[7]</sup>

Fear of childbirth seems to be an increasingly important issue in obstetric care, but the knowledge of obstetric complications associated with fear of childbirth is still limited. Data related to the frequency of women with fear of childbirth is not available from this region. This would be the first study for estimating the burden of maternal fear of childbirth.

## METHODS AND MATERIALS

This is a cross sectional study was conducted between Jan2020 to July 2020 at Outpatient department of Gynecology & Obstetrics Unit Abbasi Shaheed Hospital affiliated with Karachi medical and dental college, Karachi. Using software EPI info assuming that about 10% of all pregnant women would have fear of childbirth based on past experiences, with 95% confidence level and a bound on error of  $\pm 5.0\%$ , sample size was taken as 153 females.<sup>[1]</sup> Women who met inclusion criteria were included. Data was collected from patients after taking a verbal consent by using Non Probability consecutive sampling technique. All pregnant women between 20 -40 years of age with Gestational age >32 weeks: Confirmed by last date of menstrual period and verified by the dating scan and with negative birth experience. Negative birth experience is labeled on the basis of presence of any two parameters present including following:

1. Emergency lower segment cesarean section due to obstructed labor
2. Third or fourth degree perineal tear
3. Postpartum hemorrhage
4. Severe intensity of labor pain>7

Women with stroke, renal impairment and chronic obstructive pulmonary disease, chronic liver disease and CCF Malpresentation, Previous IUD (intra uterine death), Baby with congenital anomalies, Medical disorders during previous pregnancy like Epilepsy, Hypertension, Diabetes Were excluded from study. Permission from the institutional ethical review committee was taken prior to conduction of study. Data was collected from all enrolled women and take history of previous negative birth experience (emergency caesarean section, post-partum hemorrhage, perineal tear

and pain score). Wijma delivery expectancy questionnaire (W-DEQ) was used to diagnose fear of childbirth. W-DEQ score of  $\geq 85$  will represent intense fear.

Data was analyzed on SPSS Version 20. Mean and standard deviations for the quantitative variables like maternal age and gestational age would be calculated. Frequencies and percentages for the qualitative variables like maternal age, gravid, parity, socioeconomic status, educational status and maternal fear (yes/no) was calculated. Effect modifiers were controlled through stratification of maternal age, gestational age, parity, gravid, socioeconomic status and educational status to see the effect of these on outcome variables. Post stratification chi square test was applied taking p-value of  $\leq 0.05$  as statistically significant.

## RESULT

The mean age of the women was 30.10 years; SD  $\pm 4.10$  years. Sixty percent of the women were multiparous. Mean gestational age in our study was 35.69 weeks with the standard deviation of  $\pm 2.06$ . As shown in Table 1.

Out of 153 patients, 40 (26.1%) of the women reported fear of delivery, a score of  $\geq 85$  on the Wijma Delivery Expectancy Questionnaire and 113 (73.9%) had no maternal fear. As shown in Figure 1.

Severe maternal fear with respect to gestational age  $\geq 37$  weeks was high as compared to gestation below 35 weeks (P-value =0.00). As presented in Table 2. Stratification for gravida with respect to maternal fear showed that 32.7% primigravida had maternal fear, whereas 14.5% multigravida had maternal fear presented in P-value was 0.01.

Patients who belonged to lower class socioeconomic status had severe maternal fear as compared to patients who were in upper class as presented in Table 2 (P-value= 0.00). A low educational level were also associated with fear of childbirth

**Table 1: Demographic characteristics.**

S.no	Demographic characteristic	Frequency (n)	Percentage %
1	Age(years)		
	21-30	85	55.6%
	31-40	68	44.4%
2	Gestation(weeks)		
	32-34	47	30.7%
	35-37	61	39.9%
	>37	45	29.4%
3	Parity		
	0-1	72	47.1%
	2-3	51	33.3%

	≥4	30	19.6%
<b>4</b>	Socioeconomic status		
	Low	61	39.9%
	Middle	68	44.4%
	upper	24	15.7%
<b>5</b>	Education		
	Illiterate	52	34.0%
	Primary	56	36.6%
	Secondary	25	16.3%
	Higher	20	13.1%

Table 2: Association between Maternal fear and different variables (n-153).

S.no	Variables	Yes (n)	No (n)	P-Value
<b>1</b>	Age(years)			0.20
	21-30	25	60	
	31-40	15	53	
<b>2</b>	Gestation(weeks)			0.00
	32-34	05	42	
	35-37	15	46	
	>37	20	25	
<b>3</b>	Parity			0.41
	0-1	20	52	
	2-3	15	36	
	≥4	05	25	
<b>4</b>	Socioeconomic status			0.00
	Low	30	31	
	Middle	10	57	
	upper	00	25	
<b>5</b>	Education			0.00
	Illiterate	15	37	
	Primary	15	41	
	Secondary	00	25	
	Higher	10	10	



Figure 1: Frequency of Fear according to Wijma delivery expectancy questionnaire.

## DISCUSSION

Pregnancy is a major life event for all women. Women with child birth can have increased psychological distress during both antepartum as well as postpartum period. Management in view of proper childbirth education and counseling should be implemented in modern obstetrics. The prevalence of severe fear is thought to be between 6 to 10 % that impact on daily life.<sup>[11]</sup> Some amount of fear is therefore acceptable. Majority of women are able to cope up with these fears and anxieties by self-help efforts, social support and help of medical attendants. But when it becomes pathological apprehension it is called tokophobia.<sup>[8-14]</sup>

Previous studies reported that childbirth fears are more intense and common in primigravidae than in the multigravida.<sup>[15-16]</sup> while our study participants are multiparous females had no association between fear of childbirth and parity.

Intense fear of childbirth developing after a traumatic obstetric experience in a previous pregnancy, But it could also occur after normal delivery, a miscarriage, a stillbirth, or a termination of pregnancy. Women may also be concerned with pain, obstetric injuries, lack of control, lack of family support and, loss of the baby's, or their own, life.<sup>[17-18]</sup> An emergency caesarean section or instrumental vaginal delivery increases fear of childbirth in next pregnancy. Women who suffer from fear of childbirth during pregnancy subsequently have increased chances of emergency caesarean section or instrumental vaginal delivery.<sup>[19-20]</sup>

In our study majority of women are illiterate or having primary education and only few female are highly educated. Previous data highlighted that higher education level is associated with less fear similar results are found in this study (p-value=0.00).<sup>[16-21]</sup> Childbirth education is an effective way to alleviate fears. The information or knowledge may be provided either from books, specialists or antenatal classes. Although knowledge may partly be responsible for the origin of some of the fears, the way in which information is given determines whether it will cause or alleviate fears. Knowledge delivered in a positive way is helpful in alleviating fears. Antenatal screening tests certifying normalcy have also been shown to be effective in reducing the level of fear and anxiety experienced throughout pregnancy.<sup>[22-23]</sup>

There is lack of conformity in the tools used for measuring it, leads to variation in the global prevalence of women's fear of childbirth. The prevalence of severe fear of child birth is reported in various studies range 5 to 21 %.<sup>[24]</sup> To improve assessment of Fear of childbirth, Wijma et al. developed the Wijma Delivery Expectancy /Experience Questionnaire (W-DEQ).<sup>[25]</sup> Recently, there has been a consensus on determining severe FOC by using the W-DEQ questionnaire with a cut-off point of  $\geq 85$ .<sup>[26]</sup> Fear of childbirth (W-DEQ sum score  $\geq 85$ ) was present higher in 26.1% in our study. For some pregnant

women, negative feelings take over and they may develop a fear of childbirth, which can have consequences for their wellbeing and health, fear of childbirth appears to be part of a complex picture of women's emotional experiences during pregnancy.<sup>[27-29]</sup> This is first study shows burden of problem in our local population by using Wijma Delivery Expectancy /Experience Questionnaire, but Our study has few limitations that it has small sample size so further research is needed with larger sample to better understand the nature of fear. Another limitation is that study conducted at the single government hospital, study would involve within different health-care system.

## CONCLUSIONS

Our findings indicate that there is strong association between previous negative birth experiences and fear of child birth. These fears and anxiety have individual variations. Healthcare professionals should try to make an attempt and explore the positive as well as negative influences around the pregnant women and at the same time encourage her to use the easily available social support system as a source of help. This would facilitate satisfactory delivering experience as well as may be able to decrease the high caesarean section rate. Early identification of subjectively negative birth experiences may provide adequate treatment and the prevention of severe fear in future pregnancies.

## ACKNOWLEDGMENT

We acknowledge all study participants who included in this study.

**Funding:** None.

**Conflict:** None.

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