

Assessment Of The Experiences And Symptoms Of Post-Traumatic Stress Disorder Among The Mothers Of Premature Neonates In Selected Hospitals Of District Patiala (Punjab)

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ABSTRACT

Aim: To assess the experiences and symptoms of post-traumatic stress disorder among the mothers of premature neonates in selected hospitals of District Patiala (Punjab). **Material and methods-** A descriptive study was conducted at selected hospitals of district Patiala (Punjab) on 30 mothers having premature neonate selected by purposive sampling technique. Semi-structured interview schedule and PTSD checklist was used for collection of data. **Results-**The results of study showed that mothers were encountered with some pleasant and unpleasant experiences of having a premature neonate. Having a neonate born preterm is dominated by feelings of fear for well-being of new-born and sadness. Feelings of closeness to the neonates were important whereas separation from neonate increases the unpleasant experiences for mothers. Family members were also affected as they were also in tension and worried for the neonate's health. 76.67% of mothers showed the PTSD symptoms. Significant negative ($r = -0.531$) relationship was found between pleasant experiences and PTSD symptoms and positive ($r = 0.465$) relationship between unpleasant experiences and PTSD symptoms. There was significant association of PTSD symptoms with gender of neonate and monthly family income. **Conclusion-**Study concluded that premature birth can be traumatic event for mothers and unexpected childbirth makes them encounter with pleasant and unpleasant experiences. More unpleasant experiences increase the risk for PTSD development whereas pleasant experiences decrease the risk. **Keywords:** Experiences, PTSD symptoms, Premature Neonate, Mothers

INTRODUCTION

Motherhood is a beautiful and joyous experience to a woman. The experience of having a prematurely born neonate can have a long term impact on the parents' experiences of having a baby. According to WHO, every year, about 15 million babies are born prematurely. India is the biggest contributor to the world's prematurity burden, with almost 3.6 million premature births.

As per WHO preterm birth is defined as childbirth occurring at less than 37 completed weeks or 259 days of gestation. When a neonate is premature, the normal parental process and the mental preparation of parenthood are interrupted. Mothers of preterm neonates often experience strain and depression in the early stages following the birth of the neonate. In a

phenomenological study conducted by **Malakouti, Jabraeeli, Valizadeh, Babapour (2013)** on mothers' experiences of having a preterm infant in the Neonatal Intensive Care Unit, findings showed that the mothers were encountered with some positive and negative experiences.

Birth of a premature infant and subsequent neonatal intensive care lead to, psychological distress and trauma in parents. Posttraumatic stress disorder is a common reaction to traumatic event. According to the standardized criteria of the American Association's the posttraumatic stress disorder (PTSD) is a psychological condition starting from a traumatic event involving the threat of death or serious injury to the individual or another that is accompanied by feelings of horror, helplessness, or intense fear. According to **Gamba Szijarto et al. (2009)**, parents of preterm babies would be more likely to develop posttraumatic stress disorder (PTSD) symptoms than parents of full-term infants. The reported prevalence of posttraumatic stress symptoms after childbirth ranges from 1.5% to 32.1% (**Alder et al., 2006; Maggioni, Margola, & Filippi, 2006**). Mothers of preterm neonate often experience strain and depression in the early stages following the birth of the infants. So there is a need for mothers to cope with the stress caused by clinical condition and intensive medical care. This study examined the experiences and posttraumatic stress disorder symptoms of mothers having premature neonates.

OBJECTIVES:

- i. To assess experiences of mother having premature neonate.
- ii. To assess the symptoms of post-traumatic stress disorder among mothers of premature neonate.
- iii. To find the relationship between mothers experience and PTSD symptoms.
- iv. To find the association of the post-traumatic stress disorder symptoms among mothers having premature neonate with selected demographic variables.

MATERIALS AND METHODS

The current study was non experimental descriptive research design conducted at NICU of Rajindra Hospital, Mata Kaushalya Hospital, Amar Hospital, Aniljit Child Care Clinic and Sant Clinic of District Patiala to assess the experiences and symptoms of PTSD among mothers of premature neonate. Sample comprises of 30 mothers of premature neonates selected by purposive sampling technique. The data was collected by using demographic data sheet, semi-structured interview schedule, and Post-traumatic stress disorder checklist. Analysis of the data was done by using both descriptive and inferential statistics.

RESULTS**Table 1****Frequency and percentage distribution of Socio-Demographic Characteristics of Mothers**

Socio-demographic Characteristics	N=30	
	Frequency (f)	Percentage (%)
1. Age		
a. ≤ 20 years	05	16.67
b. 21- 25 years	18	60.00
c. 26-30 years	05	16.67
d. ≥ 31 years	02	06.66
2. Educational status		
a. No formal education	05	16.67
b. Elementary	06	20.00
c. Matric	07	23.33
d. Higher Secondary	05	16.67
e. Graduate or more	07	23.33
3. Gestational age of neonate at birth		
a. ≤ 30 weeks	02	06.66
b. 31- 33 weeks	14	46.67
c. 34-36 weeks	14	46.67
4. Occupation		
a. Housewife	25	86.67
b. Private service	03	10.00
c. Self employed	02	03.33
5. Religion		
a. Hindu	11	36.67
b. Sikh	19	63.33
6. Type of birth		
a. Normal Vaginal Delivery	04	13.33
b. Vaginal delivery with episiotomy	16	53.34
d. Caesarean section	10	33.33
7. Gender of neonate		
a. Male	18	60.00
b. Female	12	40.00
8. Birth order of neonate		
a. 1 st	23	76.67
b. 2 nd	03	10.00
c. 3 rd	02	06.67
d. More than 3 rd	02	06.66
9. Length of stay in NICU		
a. Less than 1 week	07	23.33
b. 1-2 weeks	07	23.33

Socio-demographic Characteristics	Frequency (f)	Percentage (%)
c. 3-4 weeks	10	33.34
d. More than 4 weeks	06	20.00
10. Type of family		
a. Nuclear	06	20.00
b. Joint family	24	80.00
11. Monthly income of family		
a. ≤ 10,000/-	10	33.34
b. 10,001/- to 20,000	07	23.33
c. 20,001/- to 30,000/-	07	23.33
d. ≥ 30,001/-	06	20.00
12. Abnormal birth history		
a. No	19	63.33
b. Yes	11	36.67
13. Area of Residence		
a. Rural	20	66.67
b. Urban	10	33.33

Experiences of mothers

A. Experiences of childbirth

All women reported unpleasant experiences of childbirth and addressed fear for well-being of child and most of them described anxiety (13.33 %), crying (6.66 %), and experienced pain (33.33 %) and were praying to God (30 %) when they come to know about premature child birth.

At the time of delivery majority (60.66 %) of mothers experienced pain and more than half (56.66%) of mothers were worried about the well-being of neonate. Maximum mothers (63.33 %) told that at the time of delivery bearing labour pains was the difficult moment for them. Some mothers (16.67 %) who delivered by caesarean section mentioned that pain due spinal anaesthetic injection was unbearable for them while rest of mothers (20 %) did not perceived any difficulty.

Majority (80 %) of the mothers narrated that they felt separated from newborn and large proportion of mother (66.66 %) addressed fear for the well-being of baby as baby was referred to nursery just after delivery while some mothers (13.33 %) also described that being a mother they had difficulty feeling like a mother as newborn was separated from them just after delivery.

B. Experiences of first contact with baby

All mothers described pleasant as well as unpleasant experiences of first contact with baby.

Majority (83.33 %) of mothers expressed feeling of sadness and fear by seeing newborn in NICU and large proportion of mothers also stated that they felt feeling of happiness (73.33 %) by seeing their newborn baby after long time duration. Among them half of the mothers also reported awkward feeling for weak and strange appearance of newborn. Maximum numbers (63.33 %) of mothers represented good feeling of touch and hold their newborn baby.

C. Mother Neonate Relationship

At the time of interview 13 mothers had first contact with their newborn baby after delivery. During their visits to nursery all mothers reported that they wish for wellbeing of baby and wanted to take baby to home.

Concerning the mother newborn relationship some of mothers illustrated that they feel closeness with baby by seeing them (46.66 %) and while thinking about their newborn (33.33 %). Some mothers expressed closeness with newborn during feeding (23.33 %) and while holding them in lap (23.33 %).

Regarding mother role more than half (63.33 %) of mothers reported that they had not felt any difficulty in holding their baby as most of among them had not contacted their baby and very few mothers were having previous experience of mother role, while some mothers had showed difficulty in performing mother role (36.66 %) as the baby was very weak and small.

D. Perceived Social Support

All mothers reported positive representation of medical staff, partner as well as family. Regarding staff support mothers explained that staff had provided care to the baby, nurses assisted mothers at the time of feeding. All mothers showed a sense of trust toward hospital staff.

Regarding partner and family members support all mothers described that they had provided emotional support, provided information regarding baby whenever mother is far from baby, taking care of mother.

E. Responses of Partner and Family

All mothers reported some pleasant as well as some unpleasant experiences regarding the responses of partner and family to having a premature neonate. More than half of mothers (66.66 %) described that their partner and family members were worried about well-being of newborn and were in tension as the newborn was admitted in NICU just after delivery.

F. Adaptive Strategies

All mothers stated that they used some adaptive strategies to cope up with situation. Majority (80 %) of mothers explained that they use to Pray God for the well-being of baby whenever they feel tensed or stressed. Some mother (43.33 %) stated that they use to gather information about their newborn from family members and staffs while very few (10 %) of them used to think about their newborn to overcome the stress and tension.

G. Behavioural changes

Mothers reported behavioural changes like trouble in staying asleep (63.33 %) and were in tension and stress (56.66 %) due to their newborn's hospitalization. Some of mothers also represented behavioural changes like change in food habits (20 %) and got easily angry and feeling irritated (40 %) as the baby was far from them. While few mothers (20 %) stated that they did not felt any behavioural changes in themselves.

Regarding the behavioural changes in partner and family members large proportion of mothers (66.66 %) expressed that they had not felt any behavioural changes in their partner and family while some mothers reported that their partner and family members were also in tension and stress due to babies' hospitalization (33.33 %).

PTSD Symptoms among mothers

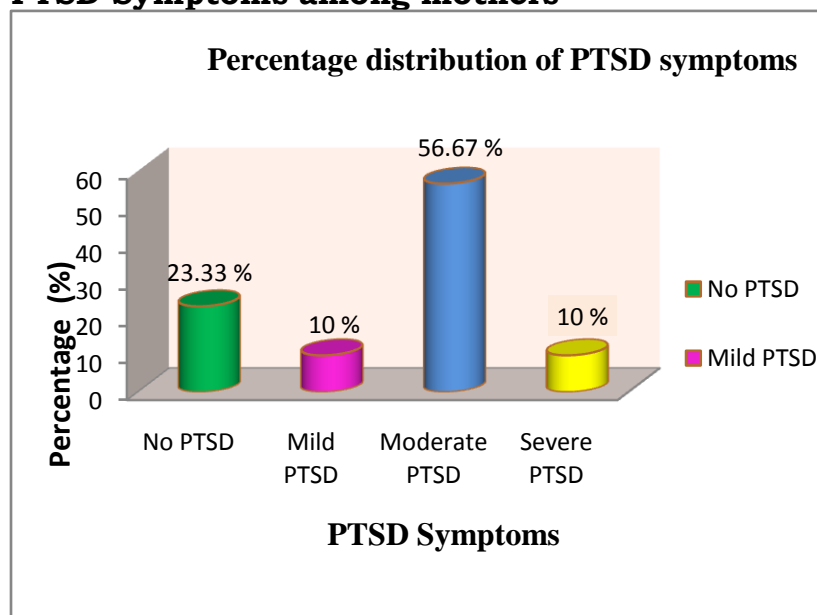


Fig 1: Bar Diagram Representing Percentage Distribution of PTSD Symptoms among Mothers of Premature Neonate

Figure 1 depicts percentage distribution of PTSD symptoms among mothers of premature neonate. It shows that majority of mothers were having moderate PTSD (56.67%) followed by mothers having no PTSD symptoms (23.33%) and least were in mild PTSD (10%) and severe PTSD (10%).

Correlation between Experiences of Mothers and PTSD symptoms

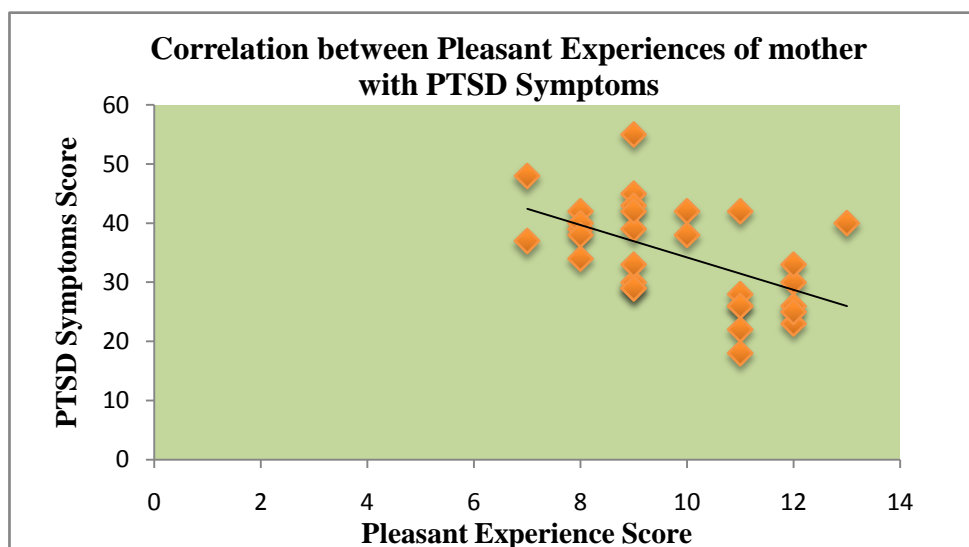


Fig 2: Scatter Diagram Showing Negative Relationship between Pleasant Experiences Score and PTSD Symptoms Score

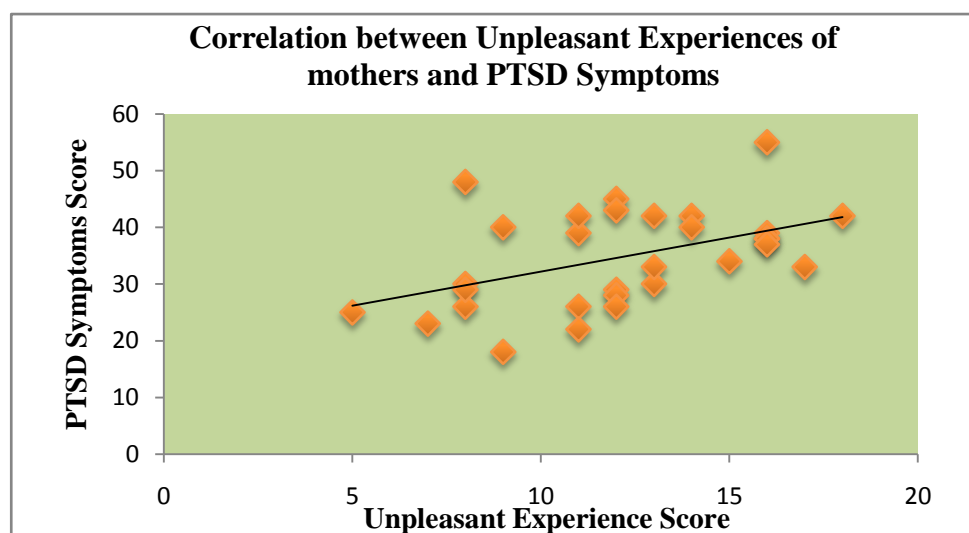


Fig 3: Scatter Diagram Showing Positive Relationship between Unpleasant Experiences Score and PTSD Symptoms Score

Figure 2 and Figure 3 depicts the relationship between mother's experiences and PTSD symptoms. It showed that there was moderate negative ($r = -0.531$) linear relationship between pleasant experiences and PTSD

symptoms of mothers while there was moderate positive ($r = 0.465$) linear relationship between unpleasant experiences and PTSD symptoms.

Table 2

Association of PTSD Symptoms with Selected Demographic Variables

Variables	Frequency (f)		χ^2 Value	df
	Below mean	Above mean		
1. Age				
a. ≤ 20 years	0	5		
b. 21- 25 years	12	6	7.2	3
c. 26-30 years	2	3		
d. ≥ 31 years	2	1		
2. Educational status				
a. No formal education	2	3		
b. Elementary	1	5		
c. Matric	3	4	6.095	4
d. Higher Secondary	4	1		
e. Graduate or more	5	2		
3. Gestational age of neonate at birth				
a. ≤ 30 weeks	0	2		
b. 31- 33weeks	7	7	2.285	2
c. 34-36 weeks	8	6		
4. Occupation				
a. Housewife	13	12		
b. Private service	2	1	2.373	2
c. Self employed	0	2		
5. Religion				
a. Hindu	4	7	1.211	1
b. Sikh	11	8		
6. Type of birth				
a. Normal Vaginal Delivery	1	3		
b. Vaginal delivery with episiotomy	7	9	2.85	2
c. Caesarean section	7	3		
7. Gender of neonate				
a. Male	6	12	5*	1
b. Female	9	3		
8. Birth order of neonate				
a. 1 st	12	11		
b. 2 nd	1	2	0.376	3

Variables	Frequency (f)		χ^2 Value	df
c.3 rd	1	1		
d. More than 3 rd	1	1		
9. Length of stay in NICU				
a. Less than 1 week	5	2	2.095	3
b. 1-2 weeks	4	3		
c. 3-4 weeks	4	6		
d. More than 4 weeks	2	4		
10. Type of family				
a. Nuclear	3	3	0	1
b. Joint family	12	12		
11. Monthly income of family				
a. ≤ 10,000/-	1	9	10.781*	3
b. 10,001/- to 20,000	4	3		
c. 20,001/- to 30,000/-	6	1		
d. ≥ 30,001/-	4	2		
12. Abnormal birth history				
a. No	10	9	0.143	1
b. Yes	5	6		
13. Area of Residence				
a. Rural	9	11	0.6	1
b. Urban	6	4		

*=Significant at $p \leq 0.05$ level

Table 2 depicts the association of the PTSD symptoms with selected demographic variables. The study showed that there was significant association of PTSD symptoms with gender of neonate and monthly family income. Whereas, there was no association of PTSD symptoms with other demographic variables such as age, educational status, gestational age of neonate, occupation, religion type of birth, birth order of neonate, type of family, length of stay in NICU, abnormal birth history and area of residence.

DISCUSSION

In the present study the mothers of preterm neonate hospitalized in NICU reported predominantly about the pleasant and unpleasant experiences after having preterm neonate. These study findings were consistent with the study findings of **Goutaudier N et al. (2010)** who described the negative as well as some positive experiences of premature infants' mother. The study findings were in consistent with the study conducted by **Arnold L et al. (2013)** who identified the themes to describe the parent's first experiences with preterm babies. That were parents blurred recall of the birth, shows anticipation of seeing and touching their baby for the first time, parents first

sight and touch of their babies and roller-coaster of emotions, importance of touch to trigger and strengthen the parent- baby bond, parents impressions of NICU and how overwhelming this was particularly for parents who had not toured NICU.

The study findings highlighted that 76.67% of mothers were having PTSD symptoms while 23.33% of mothers has not showed any symptom. Results revealed that there was moderate negative ($r = -0.531$) linear relationship between pleasant experiences and PTSD symptoms of mothers while there was moderate positive ($r = 0.465$) linear relationship between unpleasant experiences and PTSD symptoms.

There was significant association of gender of neonate and monthly family income with PTSD symptoms whereas, no association was found between PTSD symptoms and other demographic variables. These findings were supported by **Ghorbani M. Et al.**, a significant association was found between posttraumatic stress and housing and coping strategies with stress in mother whereas there was no significant correlations between posttraumatic stress in mothers and age, occupation, education, economic status, house statue pregnancy times, history of infant hospitalization, history of infant admitted to neonatal intensive care unit, wanted pregnancy, and wanted infants gender.

Conclusion

Findings of this study highlighted that premature birth can be traumatic event for mothers and unexpected childbirth make them encounter with pleasant and unpleasant experiences. More unpleasant experiences increase the risk for PTSD development whereas pleasant experiences decrease the risk. Therefore in order to prevent the risk of PTSD symptoms, it is recommended that more attention should be given to educate, assure and provide support to these mothers in order to form pleasant experiences and reduce the unpleasant experiences.

References

- Aagaard, H. & Hall EO. (2008). Mothers experiences of having a preterm infant in the neonatal care unit: A meta-synthesis. Journal of paediatric nursing, June 2008, 23(3), e26-e36. Doi:10.1016/j.pedn.2007.02.003
- American Psychological Association. Posttraumatic stress disorder. Retrieved from <http://www.apa.org/topics/ptsd/>
- Ringland, CP. (2008). Posttraumatic stress disorder and the NICU graduate mother. Journal of parental stress, 4(1). Retrieved from http://www.infantgrapevine.co.uk/pdf/inf_019_oru.
- Erlandsson, K., & Fagerberg, I. (2005). Mothers lived experiences of co-care and part-care after birth, and their strong desire to be close to their baby. Midwifery, 21, 131– 138. Retrived from <http://www.researchgate.net/.../54ae43180cf24aca1c6f8239>.

- Eutrope J , Thierry A , Lempp F, Aupetit L, Saad S, Dodane C, Bednarek N, Mare LD, Sibertin-Blanc D, Nezelof S, Rolland AC (2014). Emotional reactions of mothers facing premature births: study of 100 mother-infant dyads 32 gestational weeks. PLOS ONE, August 2014; 9(8), e104093. DOI: 10.1371/journal.pone.0104093.
- Jotzo, M., & Poets, C. F. (2005). Helping parents cope with the trauma of premature birth: an evaluation of a trauma-preventive psychological intervention. *Pediatrics*, 115(4), 915-919.
- Gambina, I., Soldara, G., Benevento, B., Trivellato, P., Visentin, S., Cavallin, F... Zanardo, V. (2011). Postpartum psychosocial distress and late preterm delivery. *Journal of Reproductive and Infant Psychology*, 29(5), 472-479. doi.org/10.1080/02646838.2011.653962
- Ghorbani, M., Dolatian, M., Shams J., Hamid, Majd, A. &Tavakolian S. (2012). Factors associated with Posttraumatic Stress Disorder and Its Coping Styles in Parents of Preterm and Full-Term Infants. *Global Journal of Health Science*; 65-73. DOI:10.5539/gjhs.v6n3p65.
- Malakouti, J., Jabraeeli, M., Valizadeh, S.,&Babapour, J.(2013) Mothers' experience of having a preterm infant in the Neonatal Intensive Care Unit, a Phenomenological Study. *Iran J Crit Care Nurs.*, 5(4):172–181.