

Research Article

Assessment of Post-Traumatic Stress Disorder Symptoms Among Postnatal Mothers Who Under Went Emergency Lower Segmental Caesarean Section, Government Hospital, Tambaram

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ABSTRACT

Child birth is viewed as a life transition that can bring a sense of accomplishment. However, for some women, birth is experienced as a traumatic event with a minority experiencing post traumatic stress especially in emergency caesarean section. The stress that results from traumatic events precipitates a spectrum of psycho-emotional and physio-pathological outcomes. Post-traumatic stress disorder (PTSD) is a psychiatric disorder that results from the experience or witnessing of traumatic or life-threatening events. To assess the post traumatic stress disorder (PTSD) symptoms among postnatal mothers, a survey approach, non experimental descriptive design on 60 postnatal mothers who underwent emergency lower segment caesarean section selected by simple random sampling technique was conducted. Traumatic event scale (TES), a standardized tool developed by wijma et al., was used to assess the PTSD symptoms. Subjects were assessed for i) child birth experience by a 4 point likert scale (Criterion A of the tool), ii) level of PTSD symptoms (Criterion B,C,D), iii) duration of the PTSD symptoms (criterion E), iv) severity of PTSD symptoms (Criterion F). Results showed that 48 (68.3%) out of 60 postnatal mothers had PTSD symptoms. 29 (48.3%) of the postnatal mothers had poor child birth experience and mild post traumatic stress disorder symptoms, 51(85%) mothers had been experiencing the PTSD symptoms. Child birth experience was associated with the demographic variables age at ($X^2 = 11.314$, $p=0.02$), occupation at ($X^2 = 12.858$, $p=0.045$) of the postnatal mothers. Level of PTSD symptoms was associated with the demographic variable occupation at ($X^2 = 10.868$, $p=0.012$) of the post natal mother. Study concludes that screening for PTSD symptoms should be a routine surveillance tool for all post natal mothers and effective interventions to prevent the illness should be strongly targeted.

Key words: (PTSD) Post traumatic stress disorder symptoms, emergency Lower segmental caesarean section (LSCS), postnatal mothers

INTRODUCTION

Childbirth can be a very painful experience, often associated with feelings of being out of control. It should not therefore, be surprising that childbirth may be traumatic for some women. Most women recover quickly post partum; others appear to have a more difficult time. Child birth can be a very painful experience, often associated with feelings of being out of control. Most of the women think of birth trauma in terms of physical injury. However, child birth can be psychologically traumatic as well. However, for some women, birth is experienced as a traumatic event with a minority experiencing post traumatic stress especially in emergency caesarean section. During child birth, especially in emergency caesarean section, many women experience a real fear of physical harm or death to themselves or their baby to meet the Diagnostic and statistical manual of mental disorders (DSM-IV) criteria for Post traumatic stress disorder (PTSD), the required criteria include experiencing, witnessing or confronting an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of oneself or others. In

many women, the childbirth experience would indisputably meet the requirements as a qualifying event for post traumatic stress disorder. PTSD can be acute (4 weeks – 3 months after delivery), Chronic (longer than 3 months) or of delayed onset (showing first symptoms 6 months after the event)^{1,2}. PTSD after child birth is an under studied condition. Traditionally, much of the data have been based on case reports, indicating that PTSD can occur following a range of child birth and child loss situations, including long or complicated labor, severe pain with labor, or delivery, caesarean section, and unanticipated pregnancy outcome, such as child loss, miscarriage or infant birth defects³⁻⁵. Wijma et al., in his study, found that clients with history of psychological problems, trait anxiety, episiotomy, feelings of loss of control, perception of low levels of support from partner and staffs were related to the development of post traumatic stress symptoms⁶. In a survey of 28 women requesting caesarean section, all had memories of a traumatic birth, including 50% who had an emergency caesarean section. It is supported by Keogh et al, in the year 2015, that women who delivered by instrumental

vaginal delivery or emergency LSCS had an increased sensitivity to anxiety and thus had a risk of having elective caesarean section⁷. Long term consequences of PTSD after child birth can be devastating to the mother, child and her family. Women who had PTSD may experience nightmares resulting in conditioned insomnia, difficulties with breast feeding, impaired bonding with the child, difficult sexual relations with the partner, and poor sense of self worth. Untreated PTSD clients may develop major mood disorders, schizophrenia, or schizoaffective disorder and personality disorders⁸. PTSD related to childbirth is frequently overlooked by the physicians, the relative newness of the diagnosis and lack of literature on the condition, may hinder recognition of this disorder. The concept of today's health care is based on preventive care rather than treating illness. So careful screening for PTSD symptoms in post partum women by the health care professionals is warranted, with special attention to mothers undergoing emergency caesarean section. Thus the present study aims to assess the level of PTSD symptoms among the postnatal mothers who underwent emergency caesarean section.

MATERIALS AND METHODS

A survey approach, non experimental descriptive study was conducted at the Post partum out patient department at the Government hospital, Tambaram. 60 postnatal mothers who underwent emergency lower segment caesarean section, who fulfilled the inclusion criteria were selected by simple random sampling technique. Sample size calculation was made based on the basis of pilot study results. 54 samples were required for the study, considering the attrition rates, the samples were rounded to 60 post natal mothers who underwent emergency LSCS. Inclusion criteria for the study were mothers who were in a) 4-8 weeks of postpartum period, b) term delivery after 37 completed weeks of gestation, and c) mothers who had history of normal pregnancy d) who underwent emergency LSCS due to obstructed labour. Exclusion criteria includes a) mothers who had pre and post term deliveries b) unmarried women, c) mothers presented with any complications during the antenatal, and the postnatal period d) mothers previous history of psychiatric illness or stress full events at the family within a period of 6 months.

Ethical Consideration

The study protocol was approved by the institutional review board, SRM University. Informed written consent was obtained from all the participants and was requested to participate voluntarily in this study. Third party consent from the authorized representative of the mothers was also obtained

Tools Used

Section I: Structured questionnaire to assess the socio demographic, clinical variables of the mothers who underwent emergency LSCS.

The socio demographic data includes the age, education, occupation, type of family, religion, socioeconomic status. Clinical variables includes number of gravid, number of parity, no, of living children, No. of antenatal visits attended. Variables were assessed by interview schedule in

the local language and related information was retrieved through antenatal records by the investigator.

Section –II: Traumatic event scale (TES) to assess the PTSD symptoms

Traumatic event scale (TES),⁹ a standardized tool developed by Wijma et al., in accordance with DSM -4 (Diagnostic statistical manual – 4) was used to assess the PTSD symptoms. TES was divided into 4 sections that includes

Criterion A- assesses the child birth experience of the mother. It consists of 4 items interpreted by a 4 point likert scale. Total scoring was 16 and classified as good child birth experience (score 1-8), Poor child birth experience (Score – 9-16)

Criterion BCD – together assesses the level of posttraumatic stress disorder symptoms. It consists of 17 items and was interpreted by a 4 point likert scale. Total scoring was 68 and was classified as < 17 (25%) – No PTSD symptoms, 18- 34 (26 - 50%) – Mild PTSD symptoms, 35- 51 (51 – 75 %) – Moderate PTSD symptoms, 52 – 68(76- 100%) - Severe PTSD symptoms.

Criterion E- assesses the duration of the PTSD symptoms experienced by the clients and is interpreted with frequency and distribution

Criterion F- assesses the severity of the PTSD stress. It consists of 17 items and it is interpreted on a 4 point likert scale.

Validity for the tool and back translation of the tool to the local language Tamil was obtained from the experts in the relevant field. Suggestions and modifications were incorporated in the tool. Data was collected by interview schedule in the local language and it took approximately 30 – 40 minutes to collect the data from a sample.

Statistical Data Processing

Statistical package for social sciences (SPSS) version 16, IBM Chicago, USA and Instat were used for data analysis. Frequency and percentage distribution was used to distribute the socio-demographic and clinical variables and the level of the PTSD symptoms. Chi square analysis was used to associate the socio-demographic and clinical variables with the level of PTSD symptoms.

RESULTS

Distribution of the socio-demographic and clinical variables of the postnatal mother who underwent emergency LSCS.

Distribution of the socio-demographic and clinical variables, shows that majority 28 (46.7%) postnatal mothers were in the age group of 17 – 20 years, 23(38.3%) mothers had higher secondary education. 36 (60%) of them were house wives, 25(41.7%) had income between Rs. 3000 – 6000, 48(80%) of them were living in semi urban area and 52(86.7%) were sedentary workers. Regarding the clinical variables, none of them had attended prenatal classes, 36(60%) were in parity two and almost 60 (100%) of all the mothers attended AN clinic regularly

Frequency and percentage distribution of PTSD symptoms among the postnatal mothers who underwent emergency LSCS.

Table 1: Frequency and percentage of the child birth experience of the postnatal mothers in the criterion A

Criterion a - child birth experiences	Frequency (n)	Percentage(%)
Good child birth experiences	12	20
Poor child birth experiences	48	80

Table 2: Frequency and percentage distribution of the level of PTSD symptoms in the criterion BCD

Criterion BCD – PTSD Symptoms	Frequency (n)	Percentage (%)
No PTSD symptoms	12	20
Mild PTSD symptoms	48	80
Moderate PTSD symptoms	-	-
Severe PTSD symptoms	-	-

Table 1, showing the frequency and percentage of the child birth experience of the postnatal mothers in the criterion A, revealed that 12(20%) had good child birth experience, 48 (80%) of them had poor child birth experience.

Table 2, Frequency and percentage distribution of the level of PTSD symptoms in the criterion BCD reveals that 12(20%) mothers had no PTSD symptoms, 48 (80%) mothers had mild PTSD symptoms and none had moderate and severe PTSD symptoms. Table 3, showing the frequency and percentage distribution of the duration of the PTSD symptoms experienced by the clients in the criterion E revealed that 51(85%) mothers had experienced PTSD symptoms since labour and 9 (15%) of the mothers had experienced after a week of labor. Table 4, showing the frequency and percentage distribution of the severity of the PTSD stress in the criterion F reveals that 12 (20%) of the mothers had no stress symptom, 41(68.3%) had mild PTSD stress, 7(11.7%) of the mothers had moderate PTSD stress and none of the mothers had severe PTSD stress.

Association of the level of PTSD symptoms with selected socio demographic and clinical variables

Association of the level of PTSD symptoms with selected socio demographic and clinical variables shows that child birth experience has got a statistical significant association with the variable age at $X^2 = 11.314$, $p=0.02$ and occupation at $X^2 = 12.858$, $p=0.04$ of the postnatal mothers who underwent emergency LSCS . The level of the PTSD symptoms was found to have significant association with occupation of the mother at $X^2 = 10.868$, $p=0.012$, whereas no significant association was found with the remaining variables. None of the variables was found to have significant association with the duration of the PTSD symptoms and the severity of the PTSD stress among the postnatal mothers who underwent emergency LSCS.

DISCUSSION AND CONCLUSION

The present study assessed the level of post traumatic stress disorder symptoms among the post natal mothers

Table 3: Frequency and percentage distribution of the duration of PTSD symptoms in the criterion E

Criterion E - Duration of the PTSD Symptoms	Frequency (n)	Percentage (%)
Present since labour	51	85
Developed since one week of Postpartum	9	15
Developed since two week of postpartum	-	-
Developed since three week of postpartum	-	-

who underwent emergency LSCS. Results showed that there were mild and moderate levels of PTSD symptoms were present among the mothers who underwent emergency LSCS. It can be concluded that women who experience traumatic childbirth may go on to develop clinically significant symptoms of PTSD in the postnatal period. The study findings was consistent with the study conducted by Ayers & Pickering on PTSD symptoms among delivered women, concluded that substantial part of newly delivered women may suffer from post traumatic stress symptoms in the first months following child birth¹⁰. Similar findings were concordant with study conducted by Beck, Cheryl Tatano, who concluded that mothers with post-traumatic stress disorder attributable to childbirth struggle to survive each day while battling terrifying nightmares and flashbacks of the birth, anger, anxiety, depression, and painful isolation from the world of motherhood¹¹. Although the literature is limited, it can be concluded that women who experience traumatic childbirth may go on to develop clinically significant symptoms of PTSD in the postnatal period. PTSD is a serious public health concern, which compels the search for novel paradigms and theoretical models to deepen the understanding of the condition and to develop new and improved modes of treatment intervention. There are many ways that health care professionals, including physicians, obstetric nurses, midwives, psychologists, psychiatrists and social workers, can address this phenomenon. These include taking a careful history to determine whether a woman has experienced trauma that could place her at risk for a traumatic birth experience; providing excellent pain control during childbirth and careful postpartum care that includes understanding the woman's birth experience; and ruling out postpartum depression. Much more research is needed in this area. This glimpse into the lives of mothers with post-traumatic stress disorder attributable to childbirth provides an impetus to increase research efforts in this neglected area.

Table 4: Frequency and percentage distribution of the severity of PTSD symptoms in the criterion F

Criterion F – Severity of The PTSD Symptoms	Frequency (n)	Percentage (%)
No PTSD stress	12	20
Mild PTSD stress	41	68.3
Moderate PTSD stress	7	11.7
Severe PTSD stress	-	-

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