

TRAUMATIC CHILDBIRTH: INCIDENCE, RISK FACTORS, AND ITS IMPACT ON MOTHERS AND THEIR INFANTS A SCOPING REVIEW

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ABSTRACT

Introduction: Childbirth is a significant event in women's lives; it is a complex, unique and subjective experience that can easily transform into a traumatic experience, for laboring women. Childbirth was not recognized as a traumatic event until 1994, when Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) guidelines were changed and a traumatic event was redefined. The new definition allowed many researchers, to consider the childbirth as a traumatic event and consequently a number of studies were undertaken.

Objective: The objective of this review was to explore definitions, incidence, and risk factors of traumatic birth, and identify its impact on the health and well-being of women and their infants. This review focused on articles that assessed criterion A.

Methods: A review of full-text articles in English, from 1998 to 2017 indexed in CINHALL, Medline and Science Direct was done. Search terms used in this review were "traumatic childbirth" and "childbirth trauma" or "postnatal psychological trauma".

Results: Traumatic childbirth has been defined inconsistently in the literature. Reviewed studies have shown that, approximately one out of three childbearing women reported their birth experience as traumatic. Ante natal, intrapartum, and postpartum variables were linked with the development of traumatic childbirth. Findings in the literature have emphasized the profound impact of traumatic childbirth on the health of mothers and their infants.

Conclusions: There is still no consensus, on the definition of traumatic childbirth in the literature. Most of the studies included in this review have evaluated traumatic childbirth, according to DSM fourth edition criteria; and no studies have evaluated it, according to the fifth edition. Further research is needed to investigate the impact of traumatic childbirth, on the physical health of the mother. Finally, health care providers should consider not only the physical health, but also the emotional and mental health of the childbearing women, during their routine care.

KEYWORDS: Childbirth, Mental Health, Emotional Health, Psychological Trauma, Traumatic Childbirth

INTRODUCTION

Childbirth is a complex, unique and subjective experience, that is considered a significant event in women's lives. For many women, childbirth is a positive experience that enabled them to gain a sense of mastery,

elation, and accomplishment (Callister, 2004). In contrast, other women described it as a negative experience, that is painful, and associated with feelings of fear, anxiety, anger, and insecurity (Sapountzi-Krepia, et al., 2011).

Over the past two decades, the concept of a "traumatic birth" has gained attention from different disciplines (Wijma, et al., 1997; Allen, 1998; Soet, et al., 2003; Beck, 2004; O'Donovan, et al., 2014; & Boorman, et al., 2014). Childbirth was not recognized as a traumatic event until 1994, when Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) guidelines were changed (American Psychiatric Association, 1994); In which a traumatic event was redefined as, an experience in which, the person witnessed or confronted serious physical threat or injury to themselves or others (criterion A1), and in which the person responded with feelings of fear, helplessness or horror (criterion A2) (American Psychiatric Association, p.468,1994). The new definition allowed many researchers to consider the childbirth as a traumatic event, but unlike other traumatic events, pregnancy and childbirth are predictable event and usually volunteers, therefore a number of studies were undertaken to broadening our understanding about traumatic childbirth (Allen, 1998, Beck, 2004; Simpson & Catling, 2015; Creedy, et al., 2000; Ayers & Ford, 2009).

According to the American Psychiatric Association (2000), the traumatic event can be evaluated by a set of criteria, these criteria are collectively used to evaluate the posttraumatic stress disorder (PTSD). In the newest edition of the Diagnostic and Statistical Manual of Mental Disorders, the fifth edition (DSM-V), these criteria were changed and criterion A2 was removed.

The purpose of this review was to explore definitions of traumatic childbirth, its associated risk factors, and to assess its impact on the health of women and their infants.

METHODS

The main focus of this review was on articles, which assessed criterion A. English full text articles, published from 1998 to 2017 that indexed in the following databases were included: CINAHL, Medline, and Science Direct. Search terms used in this review were "traumatic childbirth" and "childbirth trauma" or "postnatal psychological trauma". Further studies were identified through reference lists. Both quantitative and qualitative studies were included in this review. Each article selected in this review was reviewed for its relevancy, and if they are meeting the inclusion criteria through reading the abstract by two reviewers, who are holding a master's degree and certification in Maternal Child Nursing (MCH).

RESULTS AND DISCUSSIONS

The Definition and Incidence of Traumatic Childbirth

A review of the literature indicated inconsistency among researchers, regarding defining traumatic childbirth and that is used interchangeably with birth trauma (Elmir, et al., 2010). Ryding, et al. (2000) defined traumatic birth as "an experience of having been very afraid to die; to be hurt; to lose the baby or to have a seriously ill or handicapped child, or having an experience of having lost contact with reality in a very frightening manner" (p. 35). Beck (2004) defined birth trauma as "an event occurring during the labor and delivery process, that involves actual or threatened serious injury or death to the mother or her infant. The birthing women experience intense fear, helplessness, loss of control, and horror" (p. 28). In 2013, Beck, revised her definition, to include "an event occurring during labor and delivery, where the woman perceives that, she is stripped of her dignity. (Beck, et al., 2013, p. 8).

Reid defined traumatic birth more broadly as “is simply when the women or parental couples feel traumatized by their experience and fearfulness of a subsequent birth” (Reid, 2011, p. 119).

Approximately, one out of three childbearing women reports their birth experience as traumatic (Creedy, et al., 2000; Ford, et al, 2010; Soet, 2003). In 2010, Alcorn and his associates assessed the prevalence of traumatic childbirth prospectively, among 933 Australian women over a period of 6 months. Results from this study showed that, 45.5% of women met the criteria of traumatic childbirth in 4-6 weeks postpartum. Another Australian study found that, about 14.3% of their sample met the criteria of traumatic childbirth, at two weeks postpartum (Boorman, et al., 2014).

Due to discrepancies in research methodologies among literature, such as using different measures to assess the incidence of traumatic childbirth, timing of measurement and setting which include different health care systems, estimating the incidence and comparison among these studies is difficult.

Risk Factors of Traumatic Childbirth

In the literature, there have been several published studies on the risk factors of traumatic childbirth, which include history of mental illness, previous history of trauma and sexual abuse, Medical events during childbirth, lack of social support, lack of coping skills, and fear of childbirth.

History of Mental Illnesses

History of mental illnesses, such as depression and anxiety disorders were reported as a risk factor of traumatic childbirth. Boorman, et al. (2014) found that, women who previously suffered from depression or had depression during their current pregnancy are at higher risk of reporting childbirth, as a traumatic experience. In this study, the history of mental illnesses predicted 6.6% from the 18% of the total variance. In contrast, anxiety and stress were not associated with traumatic childbirth. O’Donovan, et al. (2014) reported that, women who expected to be anxious during childbirth and were unhappy were at higher risk, for appraisal of childbirth as a traumatic experience. In 2003, Soet, et al. found significant association between trait anxiety and traumatic childbirth, but this association disappeared when this variable was placed in the regression analysis.

Previous History of Trauma and Sexual Abuse

Several studies investigated the association between prior trauma and traumatic childbirth. Boorman, et al. (2014) reported that, history of previous trauma was associated with traumatic childbirth, but not a predictor when this variable was entered in the regression analysis. A qualitative study conducted by Allen (1998) reported similar results, seven women out of twenty found that, the course of labor can occasionally be a similar to the experiences of prior trauma, leading to the perception of childbirth as a traumatic event. Additionally, history of sexual abuse significantly increases the risk of experiencing childbirth as traumatic. Soet et al. (2003) found that, women with a history of sexual abuse were 12 times more likely to report the childbirth experience as a traumatic.

Medical Events during Childbirth and Perceptions of Traumatic Childbirth

According to Alcorn, et al. (2010) several medical events were associated with the perception of childbirth as a traumatic experience; these events include: episiotomy, assisted delivery, use of general anesthesia, emergency cesarean, neonatal admission to the neonatal intensive care unit (NICU), any injury during childbirth either to the women or her baby, medical complication for the women or her baby and the experience of a premature baby. Similar results were

reported by Beck (2004), in a phenomenological study that describes the women's experiences of traumatic childbirth, women who participated in this study reported several events as traumatic, such as: emergency cesarean, infant loss, baby admission to NICU, inadequate medical care, fear of epidural analgesia, insufficient pain management, postpartum hemorrhage, assisted delivery procedures, such as forceps and vacuum, precipitate delivery, use of epidural analgesia, prolong difficult labor, premature delivery, postpartum hemorrhage and experience of preeclampsia toxemia. Boorman et al. (2014) found that, both planned cesarean and emergency cesarean were the strongest predictors of traumatic childbirth, accounting for 8.8% of the total 18% of the variance, but not the instrumental deliveries, which contradict findings from other studies. In another study, Soet et al. (2003) reported that, high level of medical interventions during labor; severe pain during labor's first stage, lack of control during labor, cesarean delivery, and longer childbirth were associated with traumatic childbirth. According to Allen (1998), pain associated with labor makes women feel powerless and consequently, they lose the control over their childbirth leading them to perceive childbirth as a traumatic experience

Medical care, provided by health personnel was also found to be associated with traumatic childbirth. Inadequate information about delivery, less interaction with the medical staff, and inadequate care during delivery were predictors of traumatic childbirth (Creedy, et al. 2000; Soet, et al. 2003; O'Donovan, et al. 2014; Simpson & Catling, 2015). Allen (1998) reported that, women felt harmed when they received inadequate care and the staff was not present around the time of delivery, which led women to lose control and perceiving childbirth as a traumatic event. Beck (2004) supports these findings, Women who experienced traumatic childbirth stated that, they felt degraded by the care provided to them, they were abandoned, the staff was uncaring, superior, and lack of compassion. Some women stated that, nurses often talked about them, as if they were invisible. In that point of time they felt that, care provided to them was unsafe, they were overwhelmed with feelings of terror and consequently were frightened about their health and their infant's well being. All these events increased women's feelings of powerlessness and they lose control during childbirth, and eventually perceived childbirth as a traumatic event.

Additional factors also associated with traumatic childbirth. Women who are primipara or who have no children were more likely to report the childbirth experience as traumatic (Boorman, et al, 2014; O'Donovan, et al. 2014). In contrast, Soet, et al. (2003) found no association between primigravity and traumatic childbirth. Furthermore, Lack of social support, lack of coping skills, insufficient income (Soet et al. 2003), delay in holding of the mothers of their baby's after delivery, fear of childbirth and lack of childbirth preparations, were reported as predictors of traumatic childbirth (O'Donovan, et al. 2014).

Findings from these studies regards risk factors are inconsistent and the influence of socio-demographic variables on traumatic childbirth is under reported. Much of the available research has focused on the risk factors, associated with PTSD. Another shortcoming in the literature was related to methodological issues, such as small sample size (Soet, et al., 2003; Ford, et al., 2010) that may limit the generalizability of the results.

The Impact of Traumatic Childbirth on Mothers and Their Infants

Findings in the literature have emphasized the profound impact of traumatic childbirth, on the health of mothers and their infants. The negative impact of traumatic childbirth was masked by the positive outcome of childbirth, such as delivery of healthy newborn and what's perceived by the women as traumatic event was seen as routine care, by health care providers (Beck, 2004).

Elmir, et al. (2010) found that, women expressed feelings of fear, distress, anger, guilt, and frustration. Furthermore, they felt overwhelmed and controlled by the memories of this experience, even for years after birth they suffered from flashbacks and nightmares. This experience left women feeling like living in another world and was isolated from the real world (Fenech and Thomson, 2014). Allen, (1998) reported that, women expressed negative thoughts about self, such as blaming self and doubted their ability to cope with the situation.

Women's relationships were affected by traumatic childbirth. The relationship with the women's partner was discussed by Illes and Pote, (2015) found that, traumatic childbirth strengthen the relationship between the woman and her partner, while for others, this experience increased the distance and feelings of separation from the partner. Furthermore, Elmir et al. (2010) stated that, lack of understandings and empathy from women's partners or support was below expectations, affected their relationship negatively. The impact of traumatic childbirth on the relationship of the woman and her partner was lessened by social support (Iles and Pote, 2015). Other studies reported that, traumatic childbirth affected the sexual relationship between the women and her partner. Fenech & Thomson (2014) stated that, sexual relationship act as a reminder of the trauma experience and even trigger memories about the traumatic event. Other women avoided sexual relationship to avoid another pregnancy (Elmir, et al. 2010).

Reid, (2011) reported that, women were afraid to develop any attachment with the unborn child and avoided thinking about the fetus, as it was a constant reminder of the trauma they suffered previously. Furthermore, some women reported attachment problems, even after delivery and for some it was difficult to establish breastfeeding. As a result, women expressed feelings of being a failure and incompetent mothers. Moreover, some women developed secondary tocophobia or fear of childbirth, causing women to avoid normal vaginal deliveries and thus, to request cesarean delivery or they decided not to have any more children (Simpson and Catling, 2015).

The impact of traumatic childbirth on breastfeeding was addressed in a qualitative study, by Beck and Watson, (2008). For some women breastfeeding was the time to prove to self and others that, they were competent mothers and to compensate the baby for the traumatic arrival. Unfortunately, some women found that, breastfeeding stripped their dignity, was physically painful, and triggered flashbacks about the trauma.

Several studies discussed the impact of traumatic childbirth on women's mental health, during postpartum. Some women experienced feelings of depression and they have suicidal ideas after traumatic childbirth (Elmir, et al. 2010; Simpson & Catling, 2014; Fenech & Thomson, 2014). Simpson and Catling, (2015) reported that, infants of mothers who suffered from mental problems also suffered from psychological, physical and behavioral problems.

Alcorn et al. (2010) reported that, women who experience trauma during childbirth found to meet the full criteria of PTSD, for example, the incidence of PTSD at 4-6 weeks postpartum was 3.6%, Anxiety level among participants in this study was also high, after controlling PTSD, about 74% of women reported anxiety symptoms at 4-6 weeks postpartum.

A few studies discussed the impact of traumatic childbirth, on the physical health of the mother. Allen (1998) reported that, women were suffering from sleeping problems. Turkstra, et al. (2015) found that, women who experienced traumatic childbirth reported lower quality of their life and use of health care services was significantly higher than women who didn't experience childbirth trauma.

Thomson and Downe (2010), explored the possibility of positive outcome following traumatic childbirth. Women who acknowledged their childbirth as positive experience, following a traumatic experience were able to experience redemption and hence, let go the feelings of guilt and sadness, they found healing, and were being transformed, through transformation, women regained their confidence and trusted their capabilities. Women were able to forgive, but did not forget the trauma.

CONCLUSIONS

This review discussed the incidence and risk factors that were associated with traumatic childbirth, as well as the impact of traumatic childbirth on women and their infants. There is still no consensus on the definition of traumatic childbirth in the literature. The incidence rate of traumatic childbirth, ranges from 14.3% to 45.5%. Most of the studies included in this review, evaluated traumatic childbirth, according to DSM fourth edition criteria; and no studies have evaluated it according to the fifth edition.

The most common risk factor of traumatic childbirth identified in the literature were history of mental illness, previous history of trauma and sexual abuse, Medical events during childbirth, lack of social support, lack of coping skills, and fear of childbirth.

Findings in the literature have emphasized the profound impact of traumatic childbirth, on the health of mothers and their infants, so it is important to identify risk factors of traumatic childbirth so that, appropriate policies and measurements can be designed to prevent traumatic childbirth.

Much of the current literature focuses on the incidence and risk factors of traumatic childbirth; further research is needed to investigate the impact of traumatic childbirth on mother and their infants, in particular the impact of traumatic childbirth on the physical health of the mother.

Finally, Most of the published studies were conducted in developed societies; further studies are needed to be conducted in developing countries. Conducting such research may reveal cross-cultural differences.

REFERENCES

1. Allen, S. (1998), A Qualitative Analysis of the Process, Mediating Variables and Impact of Traumatic Childbirth. *Journal of Reproductive and Infant Psychology*, 16, 107-131.
2. American Psychiatric Association (1994), *Diagnostic and statistical manual of mental disorders* (4th edition). Washington, DC.
3. American Psychiatric Association (2000), *Diagnostic and statistical manual of mental disorders-text revision* (4th edition). Washington, DC.
4. Alcorn, K., O'Donovan, A. Patrick, J., Creedy, D., and Devily, G. (2010), A Prospective Longitudinal Study of the Prevalence of Posttraumatic Stress Disorder Resulting from Childbirth Events. *Psychological Medicine*, 40, 1849-1859.
5. Ayers, S. and Ford, E. (2009), Birth Trauma: Widening Our Knowledge of Postnatal Mental Health. *The European Health Psychologist*, 11, 16-19.
6. Beck, C. (2004), Birth trauma to the eye of the beholder. *Nursing research*, 53 (1), 28-35.

7. Beck, C. (2013), *Traumatic Childbirth* (1st ed.). New York: Routledge.
8. Beck, C. T., and Watson, S. (2008), Impact of Birth Trauma On Breastfeeding, A Tale Of Two Pathways. *Nursing Research*, 57 (4), 228-236.
9. Boorman, R., Devilly, G., Gamble, J., Creedy, D., and Fenwick, J. (2014), Childbirth And Criteria Of Traumatic Events. *Midwifery*. 30, 255-261.
10. Callister, L. (2004), Making, Meaning: Women's Birth Narratives. *Journal of Obstetric, Gynecological and Neonatal Nursing*, 33, 508-518.
11. Creedy, D., Shochet, I., and Horsfall, J. (2000), Childbirth and the Development of Acute Trauma Symptoms: Incidence And Contributing Factors. *Birth*, 27 (2), 104-111.
12. Elmir, R., Schmied, V., Wilkes, L., and Jackson, D. (2010), Women's Perceptions and Experiences of a Traumatic Birth: A Meta Ethnography. *Journal of Advanced Nursing*, 66 (11), 2142-2153.
13. Fenech, G., and Thomson, G. (2014), Tormented By The Ghost From Their Past: A Meta-Synthesis To Explore The Psychological Implication Of Traumatic Birth On Maternal Well-Being. *Midwifery*, 30, 185-193.
14. Ford, E., Ayers, S. and Bradley, R. (2010), Exploration of a Cognitive Model to Predict Post-Traumatic Stress Symptoms Following Childbirth. *Journal of Anxiety Disorders*, 24, 353-359.
15. Iles, J. and Pote, H. (2015), Postnatal Post Traumatic Stress: A Grounded Theory Model of First- Time Mothers Experiences. *Journal of Reproductive and Infant Psychology*, 33 (3), 238-255.
16. O'Donovan, A., Alcorn, K., Patrick, J., Creedy, D., Dawe, S., and Devilly, G. (2014), Predicting Posttraumatic Stress Disorder After Childbirth. *Midwifery*. 30, 935-941.
17. Reid, M. (2011), The Impact of Traumatic Delivery on The Mother-Infant Relationship. *International Journal of Infant Observations and Its Applications*, 14 (2), 117- 128.
18. Ryding, E., Wijma, K., and Wijma B. (2000), Emergency Cesarean Section: 25 Women's Experiences. *Journal of Reproductive and Infant Psychology*, 18 (1), 33- 39.
19. Sapountzi-Krepia, D. Tasaloglidou, A. Pschogiou, M., Lazaridou, C. and Juikunen, K. (2011), Mothers' experiences of pregnancy, labour, and childbirth: A qualitative study in northern Greece". *Journal of international journal of nursing practice*, 17, 583-590.
20. Simpson, M., and Catling, C. (2015), Understanding Psychological Traumatic Birth Experiences: A Literature Review. *Women and Birth*, 1-5.
21. Soet, J., Brak, G., and Dilorio, C. (2003), Prevalence And Predictors Of Women's Experience Of Psychological Trauma During Childbirth. *Birth*, 30 (1), 36-46.
22. Thomson, G. and Downe, S. (2009), Changing the Future to Change the Past: Women's Experience Of A Positive Birth Following A Traumatic Birth Experience. *Journal of Reproductive And Infant Psychology*. 28(1), 102-112.

23. Turkstra, E., Creedy, D., Fenwick, J., Buist, A., Scuffham, P., and Gamble, J. (2015), Health Services Utilization Of Women Following A Traumatic Birth. *Women's Mental Health Journal*. 18, 829-832.
24. Wijma, K., Soderquist, J., and Wijma, B. (1997), Posttraumatic Stress Disorder After Childbirth: A Cross Sectional Study. *Journal of Anxiety Disorders*, 11 (6). 587-597.