

Chapter 2: Literature Review

Birth - Past to Present

In 1940, about 44% of births occurred at home with only the mother and female family members present, which had decreased to 1% by 1969, where it has remained (Gooding, et al., 2011). Technological advances and changes in how we view birth have shifted the view of childbirth from a natural, normal process at home, to a medical situation with many interventions, in a medical environment that was intended for healing the sick (Parratt, 2002). In the *Listening to Mothers II* survey, 90% of women having vaginal births were monitored continuously with electric fetal monitoring, 71% had epidural analgesia, and 55% were given oxytocin to speed up labor (Stark, 2008). According to the Centers for Disease Control (CDC), the rates of cesarean delivery increased by 60% from 1996 to 2009, with a rate in 2011 of 32.8% and 3.50% of delivery by forceps or vacuum extraction (Martin, Hamilton, Ventura, Osterman, & Mathews, 2013). Despite that the United States spends more money per capita on maternity care than any other country (Gaskin, 2008), it's estimated to be ranked 51st for infant mortality and 48th for maternal mortality (Central Intelligence Agency, 2013). Understanding the history of birth and how the model of birthing has changed to where it is today is an important aspect of understanding the potentiality of birth as traumatic.

Traumatic Birth

Studies have identified objective labor complications that can lead to a negative birth experience, such as unplanned instrumental delivery, placental abruption, shoulder dystocia, eclampsia during labor, maternal infection during labor, active phase of labor lasting longer than twelve hours, severe vaginal tears (degrees 3 or 4), extensive blood loss (more than 1,000 ml),

umbilical cord complications, intrapartum asphyxia, low neonate 5-minute Apgar score of less than seven (Garthus-Niegel, von Soest, Vollrath, & Eberhard-Gran, 2013), cardiac arrest, stillbirth, infant death, congenital anomalies, manual removal of placenta, premature birth, and rapid delivery (Beck, 2004) as well as women who labor and deliver without any interventions (Thomson & Downe, 2008). Given the increases in medical interventions mentioned above and the positive correlation between them and the view of the birth experience as being traumatic, it is important to acknowledge and validate mothers who feel traumatized by experiencing these interventions during childbirth.

Subjective experiences related to a traumatic birth experience that have been identified are the mother feeling disconnected from the healthcare professionals, limited agency (physically, psychologically, and cognitively), feeling as though their voice and sense of self was disregarded and/or minimized (Thomson & Downe, 2008), low levels of perceived and/or negative support and interactions during labor and delivery, inadequate information, differences between expectations and actual experiences, fear of labor/delivery and/or epidurals, feeling invisible to and abandoned by those around her during labor and delivery, feeling stripped of her dignity and control during the experience, feelings of powerlessness, and feeling they and/or their baby received unsafe care (Beck 2004). Mothers often feel that the events that happened to them and/or their feelings during the experience didn't matter, that all that mattered was the safe arrival of a healthy infant (Beck, 2004). This is described as *the end justifies the means*, but mothers question at whose expense and at what price. Beck describes birth trauma as being in the *eye of the beholder* (Beck, 2004) as the subjective experience is considered more influential than objective variables and has a higher association with PTSS (Garthus-Niegel et al, 2013).

Prevalence of PTSS, PTSD and PPD in Women

In the late 1970s, two French obstetricians first documented PTSD-like symptoms in a small group of women (Bailham & Joseph, 2003). In 1980 PTSD was first recognized by the American Psychiatric Association (APA) as a mental disorder in the Diagnostic and Statistical Manual of Mental Health Disorders (DSM) third edition (Zimmerman, 2013) but it wasn't until the fourth edition that birth could be considered a traumatic event that may lead to PTSD (Olde, van der Hart, Kleber, & van Son, 2006). According to the DSM-V, PTSD symptoms can include intrusive memories of the traumatic event, avoidance of people, places, and/or things that remind the individual of the traumatic event, negative alterations in cognitions and mood that are associated with the negative event, and alterations in arousal and reactivity associated with the event, which last more than a month (American Psychiatric Association, 2013).

In the U.S., the lifetime prevalence of women diagnosed with PTSD as a result of experiencing any traumatic event is between 10.4% and 18.3% (Ayers, 2004). PTSD is highly co-morbid with other psychological problems including depression, anxiety, and substance abuse (Ayers, 2004). Postpartum depression (PPD) affects between 10% to 20% of all new mothers (Kendall-Tackett, 2007). Depression is often present in individuals who develop PTSD after experiencing any traumatic event (Leeds & Hargreaves, 2008); in one study, six out of eight women who had clinical PTSD also met the criteria for major depressive disorder (White, Matthey, Boyd, & Barnett, 2006).

Prevalence rates of PTSS after childbirth range from 1.5% to 30.1% (Alder, Stadlmayr, Tschudin, & Bitzer, 2006; Ayers, 2004; Creedy, Shochet, & Horsfall, 2000; Soet, Brack, DiIorio, 2003) and prevalence rates of women fully meeting the DSM-IV PTSD diagnostic criteria due to

traumatic childbirth at 6 weeks postpartum of 2.8% (Ayers & Pickering, 2001) to 3% (Czarnocka & Slade, 2000; Soderquist, Wijma, & Wijma, 2006), to 5.6% (Creedy et al., 2000). At 6 months postpartum prevalence rates range from 1.5% (Ayers, 2001) to 2.6%, and at 12 months postpartum is 2.4% (White et al., 2006).

Research indicates several risk factors for the development of post-traumatic stress responses following childbirth, including prenatal depression, prenatal anxiety, prenatal PTSD, a history of psychiatric problems, and prior trauma, especially childhood sexual abuse, medical interventions, powerlessness, pain during labor and/or delivery, long labor and/or delivery, uncaring labor and delivery staff, and lack of support (Beck, Driscoll, & Watson, 2013). Adewuya, Ologun, and Ibigbami (2006) conducted a study on PTSD after childbirth in Nigerian women and found that the four predictors of PTSD were pregnancy related hospital admission, mode of delivery, mode of delivery of placenta, and mothers' experiences of control during childbirth.

Effects of PPD and PTSD on Individuals and Families

Traumatic childbirth, postpartum depression (PPD), and PTSS/PTSD can have devastating effects on the mother, infant, and family as secure mother-infant attachment, which is vital to the long-term optimal health of the infant, can suffer as a result of PPD, PTSS and PTSD (Kendall-Tackett, 2007; Mowery, 2011). Studies have shown children of mothers who are depressed and have PTSD are at an increased risk of developing psychiatric problems, behavioral issues, and show social and achievement deficits, as well as adjustment difficulties when the mother's symptoms lessen (Bailham & Joseph, 2003). Mothers with depression and PTSD are more likely to stop breastfeeding, which has negative health effects for the mother and baby, and

PPD and PTSD have been shown to increase inflammation in mothers, which increases the risk of infection for both mothers and babies (Kendall-Tackett, 2007). Inflammation can cause damage to and problems with the cardiovascular, nervous, musculoskeletal, circulatory, and digestive systems, as well as cause abnormalities in thyroid function and hormone functions (Mowery, 2011). Women have reported feeling distanced from and the need to avoid their infants, especially when the infants trigger memories and flashbacks of birth trauma, experience feelings of guilt and anger towards themselves and healthcare professionals, and feel isolated from their friends, families, and other mothers who may not understand their experience (Beck, 2004). For some women the distressing symptoms last for many years (Beck, 2006).

Trauma and Memory

Ordinary memories are narrative in form, that is, "affect is linked to and contained in an episode that is specific to time, place, character, and meaning" (Wigren, 1994, p. 416). Over a century ago, Pierre Janet noted through his clinical observations that ordinary memories were assimilated and accommodated into existing memory schemas while traumatic experiences do not fit easily or may be unable to be accommodated into existing memory schemas, due to their novelty and/or unexpected nature (van der Kolk & van der Hart, 1991). When an individual is exposed to trauma, because the experience can not be readily incorporated into the existing memory system, it can not be organized linguistically and "failure to arrange the memory in words and symbols leaves it to be organized on a somatosensory or iconic level: as somatic sensations, behavioral reenactments, nightmares, and flashbacks" (van der Kolk & van der Hart, 1991, p. 442). Having an incomplete narrative of an experience is a source of psychopathology, including post-traumatic stress (Wigren, 1994).

Complete narratives make sense of an experience and

although the specific ways stories are told vary both between individuals and between cultures, any story that divides experiences episodically, connects events causally, elicits and makes sense of affect, and considers the consequence of events for characters, may be considered a complete narrative (Wigren, 1994, p. 416).

Interventions

The majority of interventions reported thus far involve one or two debriefing or counseling sessions within a few days of the birth and completion of a questionnaire around 4 to 6 weeks postpartum, which have not led to reduced PTSD symptoms and in some cases women exhibit a worsening of symptoms (Ayers, 2004; Gamble & Creedy, 2009). Cognitive behavioral therapy (CBT), Eye Movement Desensitization and Reprocessing (EMDR), and hypnotherapy have been effective treatments for non-obstetric traumas resulting in PTSD but more research is needed to determine if these are effective for women after traumatic birth (Ayers, 2004; Gamble & Creedy, 2009; van der Kolk et al., 2007; Zimmerman, 2013). Other treatment possibilities include exposure therapy, medications (Mowery, 2011), reducing maternal stress and maternal inflammation, and encourage breastfeeding (Kendall-Tackett, 2007). Studies that have examined the effect of writing a coherent story and the level of articulation of trauma narratives on individuals' mental health have shown the ability to do so is "positively correlated with better recovery and coping" and "negatively correlated with severity of anxiety symptoms shortly after the trauma and with the severity of later PTSD symptoms" (Tuval-Mashiach, et. al, 2004, p. 281). A few studies on the efficacy of using narratives or encouraging women to write down their birth story have been done but further studies quantifying the results are necessary to determine the efficacy of this approach with this population (Beck, 2006).