Posttraumatic Stress Disorder Following Childbirth: Predictors, Effects, Interventions, Implications and Conclusions

by

Emily Hooker
B.S. Mind Body Health Psychology
Mansfield University

for

PSY 4490 - Senior Seminar
Dr. Gretchen Sechrist
Spring 2016
Abstract

Posttraumatic Stress Disorder Following Childbirth (PTSD FC) is a relatively new area of research in which research suggests the disorder should have its own separate diagnosis in the Diagnostic and Statistical Manual (DSM). There are specific differences in course, diagnostic criteria, and trauma type between PTSD FC, PTSD of other traumas, and Post-Partum Depression (PPD). PTSD FC has several predictors from both past and current pregnancies. The disorder also has several effects including those on mother-baby attachment and couple relationships. Many preventions and treatments have been suggested with limited research. PTSD FC has significant implications on the mother, the child, and others. Because of this, increasing knowledge of the disorder is necessary to protect these populations. The DSM and medical professionals should recognize PTSD FC as a separate diagnosis with its own treatment plan.
Posttraumatic Stress Disorder Following Childbirth

Predictors, Effects, Interventions, Implications and Conclusions

PTSD, at this point, is well researched and innovative treatments are taking shape to aid those who have undergone trauma. A new and not so thoroughly studied branch of Posttraumatic Stress Disorder is that following childbirth (PTSD FC). Research began in the late 1990’s and has made significant progress since then. A large amount of that progress is in the area of the predictors of developing PTSD after having a child and why some women develop the disorder and others do not. There has been a small amount of research on the possible effects that PTSD FC could have on new mothers considering the many changes occurring within their environments and bodies. There is even a smaller amount of research on what can be done about this disorder in new mothers, which treatments will work and which preventions will minimize the prevalence. From the current research stems ideas and areas for future research and implications of this particular branch of PTSD.

The goal of this paper is to review the current literary research that exists on Posttraumatic Stress Disorder following childbirth. Specifically, this paper will identify current research on the significant predictors of PTSD and what characteristics women that develop PTSD following childbirth have, which women who do not develop the disorder following childbirth lack. This paper will not only explore what characteristics have shown to be significant predictors, but also which characteristics have shown not to be significant predictors. In addition, this paper will investigate which predictive characteristics are controversial and have mixed significance within different studies. Following predictions, this paper will describe the possible effects that can occur as a result of a new mother
developing PTSD. Specifically, there will be a focus on mother-child attachments and couple’s relationships following childbirth. Next, this paper will examine interventions in the forms of treatments and preventions. Because this is a new area of study, there has not been a lot of research done on the treatments and preventions that are proven effective. This paper will identify those that have been addressed. Finally, the implications and suggestions for future research are discussed.

**Posttraumatic Stress Disorder (PTSD) General Overview**

**General PTSD**

**Prevalence.** PTSD occurs as a result of exposure to trauma. The prevalence of PTSD in the adult population averages around 7.8% (PTSD, 2015). Prevalence among women (10.4%) is twice as much as men (5%) (PTSD, 2015). PTSD is higher among particular populations as compared to the general public. Higher than average rates of PTSD are seen among those with careers that expose them to trauma such as firefighters, police officers, and other emergency personnel (American Psychiatric Association, 2013). Between 33% and 50% of those who have been victims of sexual abuse, military battle and imprisonment, politically driven genocide or incarceration will develop PTSD (American Psychiatric Association, 2013). Even though rates among European, Asian, African, and Latin American countries are quite low (0.5-1.0%), rates among Latinos, African Americans, and American Indians are higher than American Non-Latino Caucasians (American Psychiatric Association, 2013).

**Development and course.** PTSD can occur as young as one year old and there may be delayed expression (American Psychiatric Association, 2013). This means that some symptoms may show between immediately after trauma to three months after trauma, but
full diagnostic criteria may not be met for months or years after the first presentation of symptoms (American Psychiatric Association, 2013). 3.5% of adults with PTSD recover within twelve months, but some may continue to have full diagnostic criteria for longer than fifty years (American Psychiatric Association, 2013). Symptoms can be aggravated or can reoccur with reminders of the trauma or factors such as diminishing health, reduced mental performance among the elderly, and social isolation (American Psychiatric Association, 2013).

**Diagnostic Criteria**

The DSM-V outlines the diagnostic criteria for what combination of symptoms qualifies as PTSD. A person must have been exposed to trauma in terms of “actual or threatened death, serious injury, or sexual violence” (American Psychiatric Association, 2013, p 271). The person could have been directly affected by the trauma or have been a witness to trauma. There must be a presence of intrusion symptoms such as troubling dreams or memories of the event, flashbacks, and anguish occur from internal or external prompts that represent the endured trauma. A person also shows avoidance of events, experiences, or symbols that trigger the event. There can also be a presence of temporary amnesia, inability to trust, negative mood, feelings of isolation from others, inability to experience optimistic sentiments. There is also a presence of hyperreactivity and arousal including an overstated startle reaction, focus issues, hypervigilance, and problems with sleep. In order to be diagnosed with PTSD, these symptoms cannot be attributed to the effects of substances such as drugs or alcohol and these symptoms must have begun after the trauma occurred (American Psychiatric Association, 2013).

**Comorbidity**
Depression, anxiety, bipolar disorder, and substance abuse disorders are often comorbid with PTSD (American Psychiatric Association, 2015). Those with PTSD are 80% more probable to have these comorbid disorders than those without PTSD. Substance abuse and conduct disorders are more likely in women than in men (American Psychiatric Association, 2015).

**PTSD Following Childbirth (PTSD FC)**

**PTSD FC differing from PTSD.**

PTSD FC is a relatively new area of PTSD study that has received notice only within the previous twenty to thirty years. There has been conflict as to whether PTSD FC is any different than the general diagnosis of PTSD. There is a large amount of evidence stating that PTSD FC is different than PTSD as a result of other traumas.

PTSD resulting from other traumas usually decreases over time, with 44% of PTSD patients recovering unexpectedly within ten months of the diagnosis, whereas PTSD FC has shown inconsistent results in terms of patterns of prevalence over time (McKenzie-McHarg, Ayers, Ford, Horsch, Julie, Sawyer, Stramrood, Thomson, & Slade, 2015). PTSD develops in between 5-10% of people who experience trauma (Van Pampus, Wolf, Weijmar Schultz, Neeleman, & Aarnoudse, 2004). The prevalence for PTSD FC is slightly lower at around 3.1% (Grekin & O’Hara, 2014). For example, Denis, Parant, and Callahan (2011) found that the number of women in their study that met criteria for PTSD FC went from 5% at one month postpartum to 2.9% at nine months postpartum. On the other hand, White, Matthey, Boyd, and Barnett (2006) found that 2% of participants had PTSD FC at six weeks postpartum, 2.4% had PTSD FC at six months postpartum, and 2.6% had PTSD FC at twelve months postpartum. Ayers, Joseph, McKenzie-McHarg, Slade, and Wijma (2008) suggest
that the differences in prevalence not only between PTSD and PTSD FC, but also within PTSD FC, could be because the result of the trauma causing the PTSD FC is a child whom the mother is around every day. The exposure to the child on a constant basis could result in exposure therapy and alleviate symptoms of PTSD FC in some women, whereas with other women the exposure to the child on a daily basis may agitate symptoms and result in longer lasting effects.

McKenzie-McHarg and colleagues (2015) indicates that with PTSD the trauma is different in many ways than the trauma one is exposed to when diagnosed with PTSD FC because society views having a child as a positive, but stressful, event and there are social schemas for childbirth and what should be expected. Society gives women the mindset that the birth will be painful, but as soon as the baby is visible and in the mother’s arms, all the pain will suddenly be gone and worth the agony. For some women, this is not the case and they don’t know how to handle it. Some other differences pointed out by Ayers and colleagues (2008) between others traumas resulting in PTSD and childbirth are that birth is expected, unlike a bomb going off or getting sexual assaulted for example. When giving birth, usually there are multiple people present who are helping the mother through, unlike other traumas. Birth is seen as a positive event in society unlike war, natural disasters, or sexual assault. Birth is usually voluntary, that is, the woman knows what is going to happen and is willing to go through the birth process. Other traumas on the other hand such as being in active duty, undergoing a natural disaster or assault are not voluntary. Additionally, with women undergoing birth, their bodies are enduring huge hormonal changes and bodily adjustments, which makes PTSD FC a different scenario than PTSD from other traumas (Ayers et al., 2008).
**PTSD FC differing from PPD**

Because the comorbidity of PTSD FC and Post Partum Depression (PPD) can be fairly high, at times it can be difficult to understand that PTSD FC is a different disorder entirely from PPD. Comorbidity of PTSD FC and PPD has been found to span between 20 and 75% (McKenzie-McHarg et al., 2015). Multiple studies have found the correlation between PTSD FC and PPD to be 0.63 (White et al., 2006; Parfitt & Ayers, 2009). This means that the two have a fairly strong positive correlation, suggesting that as depression symptoms increase, PTSD FC symptomology will also increase. This information also adds evidence that the two are different disorders because if they were the same disorder the comorbidity would be much higher, near or at 100%, and the correlation would be much closer to 1.00.

Even though the exact progression and starting point of PTSD FC are not completely understood, it has been suggested by clinicians that PTSD FC precedes post-childbirth depression (McKenzie-McHarg et al., 2015). The correlation occurs because in the DSM-V the criterion of PTSD was altered to include negative cognition and mood, which is also a criterion for PPD. Maggioni, Margola, and Filippi (2006) found that depression during pregnancy influences the intrusion scale of PTSD after childbirth. Because PTSD FC is a new area of research, many women with PTSD FC are misdiagnosed as having PPD and therefore are treated with measures for the incorrect disorder (McKenzie-McHarg et al., 2015). This is, of course, not helpful to the women and their recovery. This is why it is important to distinguish differences between these two disorders and teach clinicians how to properly diagnose and treat each disorder separately.

**Prevalence**
Now that the differences between PTSD FC and PTSD and PPD have been distinguished, it is important to know the prevalence of PTSD FC so that it is not over or under diagnosed. Onoya, Shafer, Goebert, Morland, Matsu, and Hamagami (2013) discovered a dose-response relationship between the experience of trauma and PTSD symptoms being that each traumatic event endured increased PTSD symptom score by 2.4. It has been found that overall 3.1% of women who have a child will develop PTSD FC, but that percentage can reach 15.1 in high-risk groups such as those with previous diagnosis of PTSD or previous stillbirths (Grekin & O’Hara, 2014).

Studies have varied around the average diagnostic prevalence. Wijma, Soderquist, and Wijma (1997) found 1.7% of participants met criteria for PTSD diagnosis related to delivery trauma. Davies, Slade, Wright, and Stewart (2008) discovered that 3.8% of participants had PTSD FC. Onoye, and colleagues (2013) established that 2.8% of participants had PTSD FC. Another study revealed 3% of participants had developed PTSD FC (Soderquist, Wijma, Wijma, 2006). Based on previous studies 3% seems like a good estimate of prevalence.

It has been recommended by researchers and clinicians that there needs to be a treatment plan for women who have multiple subscales of PTSD FC but do not meet all criteria (Polachek, Dulitzky, Margolis-Dorfman, & Simchen, 2015; McKenzie-Mcharg et al., 2015). This proposal was made because through research it has been found that a large percentage of mothers who do not meet feel diagnostic criteria are still in turmoil and meet one or more of the PTSD subscales. For example, in one study 32.1% of participants met criteria for one or more subscales of PTSD (Maggioni, et al., 2006). In another study 10.5% of participants had subclinical posttraumatic stress (White et al., 2006).
PTSD FC can occur in other people present at the birth besides the mother. Research has shown instances of PTSD FC occurring in both fathers present at birth and in medical staff (McKenzie-McHarg et al., 2015). There have been two published and two unpublished studies completed in the United Kingdom and in Australia that have found PTSD FC in fathers can range from 0-5% (Ayers et al., 2008). There has not been a lot of research done on the percent of medical or hospital staff that experience PTSD after being present during a traumatic birth because this is a new area of study.

It is possible that the prevalence could increase due to the changes from the DSM-IV to the DSM-V. The new DSM-V criteria removed the necessity of having the feeling of fear, helplessness, and horror of your life ending and included the negative cognition and mood criteria; the disorder has also been re-categorized from an anxiety disorder to a trauma and stress-related disorder (McKenzie-McHarg et al., 2015). It was found that in the United Kingdom 0.1% of births are considered life-threatening by doctors, though many women giving birth perceive it to be life threatening and have a observation of fear, horror, and helplessness (Ayers et al., 2008). Because the DSM-IV included criteria in which the trauma was literally life threatening and that is not usually the case with today’s medical advances and technology in terms of childbirth, the prevalence was smaller. Now that that aspect has been removed, prevalence will most likely increase.

**Predictors of PTSD FC**

**Does Predict PTSD FC**

Much of the research completed thus far in this area has been related to determining what predicts why some women will develop PTSD FC and others will not. These predictors are categorized into characteristics of past pregnancies, occurrences during the
current pregnancy and anticipation of the birth, elements of the actual birth process and mode of delivery, and demographics of the women giving birth.

**Characteristics of past pregnancy.** Many predictors of PTSD FC in a current pregnancy are derived from features of a previous birth. For example, if a woman was emotionally distressed, sad, or anxiety throughout a previous pregnancy it is more likely she will develop PTSD following the current pregnancy (Polachek et al., 2015). Along those lines, if a woman had previous difficulties during the birthing process, had a negative evaluation of past deliveries, or had received counseling for a previous pregnancy or birth then she is more likely to develop PTSD FC (Schwab, Marth, and Bergant, 2012; Polachek et al., 2015; Denis et al., 2011; Wijma et al., 1997; Soderquist et al., 2006). In addition having a previous loss in terms of a miscarriage or stillbirth, or having children closer than two years apart, were also significant predictors of developing PTSD FC (Giannandrea, Cerulli, Anson, Chaudron, 2013; Modarres, Afrasiabi, Rahnama, and Montazeri, 2012).

**Attributes of the current pregnancy.** Much like past pregnancies, elements of the current pregnancy can attribute to the development of PTSD FC. The presence of an emotional crisis during pregnancy increases the likelihood of developing PTSD FC (Polachek et al., 2015). Complications during pregnancy can affect the risk of developing PTSD FC, specifically noted in the research was having severe preeclampsia and HELLP Syndrome (Maggioni et al., 2006; Modarres et al., 2012; Van Pampus et al., 2004). Having complications could increase the prevalence because with the presence of complications there comes a higher anticipation that something could go wrong. This could lead to a higher anticipation for severe pain during birth, and an intense fear of childbirth, which are also significant predictors of PTSD FC (Soderquist et al., 2006; Polachek et al., 2015;
Schwab et al., 2012). In addition, planned pregnancies have fewer cases of PTSD FC than accidental pregnancies (Moghadam, Shamsi, and Moro, 2015). This could be related to having a sense of control in planning ahead.

**Events during birth.** The birth itself has many predictors of PTSD FC. Having complications has a large influence of the formation of PTSD FC (Maggioni et al., 2006). Being induced, curettage, transfer to a high-risk institution, and having assisted labor all contribute to the disorder (Moghadam et al., 2015; Denis et al., 2011; Parfitt & Ayers, 2009). Having an infant that is of low birth weight and leading to a lengthy visit in the NICU can also cause development of PTSD FC (Ahlund, Clark, & Hill 2009). These all have to do with a growing fear for the child’s safety and for the mother’s, as well as, a sense of a loss of control in the situation (Parfitt & Ayers, 2009). A mother is giving not only control of her body, but her child’s life, to the medical professionals around her, especially in complicated or high-risk pregnancies. This can be very terrifying and can lead to PTSD FC.

PTSD FC is also predicted by a lower satisfaction of the birth experience, which can form from not only complications, but also from negative experiences with the medical professionals and staff (Parfitt & Ayers, 2009; Wijma et al., 1997). Having medical staff that feel supportive, are knowledgeable, and keep the mother in tune with what is occurring with her body and her baby can increase the mother’s sense of control and decrease fears, therefore reducing her chance of developing PTSD.

The type of delivery the mother undergoes has a large affect on the development of PTSD FC. This again relates to a sense of control and a growing understanding of what is happening to herself and her baby. The different modes of delivery include: instrumental vaginal, emergency C-Sections, regular vaginal delivery, and planned C-sections (Ryding,
Wijma, & Wijma., 1998). The highest risk comes from an instrumental vaginal delivery because the mother remains awake and the baby has been be physically sucked out or pulled out of the mother’s vagina by use of a vacuum or a tong-like instrument; because of this instrumental vaginal delivery is the most significant of all the modes in forming PTSD FC (Ryding et al., 1998). The next most significant predictor are emergency C-sections because of the loss of control in the birthing situation (Ryding et al., 1998; Modarres et al., 2012; Parfitt & Ayers, 2009). A regular vaginal delivery with no complications shows a low risk because though labor occurs spontaneously, the mother knows was is happening and expected the events to occur (Ryding et al., 1998). A planned C-section shows the lowest amount of risk for PTSD FC because there is no guessing as to what will happen. The mother is numbed or put out and cannot see what is happening, the doctors have walked though the procedure beforehand and there is no sense of a loss of control (Ryding et al., 1998).

Demographics. The demographics of the mother and previous mental health status can affect the chance of developing PTSD FC. First time mothers are more likely to form the disorder (Wijma et al., 1997; Denis et al., 2011). In terms of mental health, if the mother had been diagnosed or had symptoms of PTSD, depression, or anxiety prior to becoming pregnant or had recent counseling and self reported psychological problems she is at risk for developing PTSD FC (Wijma et al., 1997; Onoya, Goebert, Moreland, Matsu, and Wright, 2009). In addition, Onoya and colleagues (2009) found that women who have endured relational violence were twice as likely to have PTSD FC.

Does Not Predict PTSD FC
While investigating predictors, researchers have found some information that does not predict developing the disorder. It has been found that there is no significant relationship between PTSD FC and maternal age, marriage status, or number of kids (with the exception of nulliparity), employment status, or ethnicity (Polachek et al., 2015; Maggioni et al., 2006, Moghadam et al., 2015, Onoya et al., 2009). These are important to know so that clinicians do not treat women of diverse demographics differently because they all have the same rates of developing PTSD FC. Additionally, in regard to the effects of having a stillborn, the amount of time since the infant’s death did not predict PTSD FC in current children or from the deceased child (Carriatore, 2007). Meaning that there was no decrease in PTSD symptoms no matter if the child had passed five months ago or five years ago and that stillbirth increased the chance of developing PTSD FC with future children no matter how much time had passed between the stillbirth and future pregnancies.

**Conflicting Research Findings**

A few studies have found conflicting results in terms of predictors of PTSD FC. Maggioni and colleagues (2006) found no significance of attending a birth class as an inverse predictor of PTSD FC, while Denis and colleagues (2011) did. This means that Maggioni and colleagues (2006) found that attending a birth class did not reduce the prevalence of PTSD FC, while Denis and colleagues (2011) did find that attending a class reduced the likelihood of developing PTSD FC. The differences in findings could be related to the type of birth classes attended or what was taught, especially because the study ran by Denis and colleagues (2011) was held in France and the other was held in Italy. There could be cultural differences at play. Social support is a part of this as well, if the
participants already had social support and a sense of control, perhaps they were already at low risk for developing PTSD FC and therefore attending a class made no difference.

Polachek and colleagues (2015) found that maternal age was not a predictor and Modarres and colleagues (2012) found that maternal age is a predictor of PTSD FC. Participants in Polachek and colleagues (2015) study were recruited from a high-risk clinic and their mean age was 33.5 years. Participants in Modarres and colleagues (2012) study were not high risk, had a mean age of 26.9, and were Iranian. Modarres and colleagues (2012) also included four times as many people in his study than Polachek and colleagues (2015). All of these differences could cause variability in the results.

Education level is another possible predictor with conflicting results. Moghadam and colleagues (2015) found that education level was not a significant predictor, whereas, Modarres and colleagues (2012) did find that education level was a significant predictor of PTSD FC. There are not a lot of differences within these two studies, therefore to decide if education level is a significant predictor, additional research much be completed.

**Effects of PTSD FC on the Mother and Others**

**Mother-Baby Attachment Issues**

**Effects on baby temperament.** Studies looking at mother and baby attachments have found that babies of mothers with PTSD FC have different temperaments and behaviors than babies of mothers without PTSD. Davies and colleagues (2008) found that infants were less warm, more invasive, had more difficult temperaments, and were more prone to stress and harder to soothe when mothers had PTSD FC than when mothers did not. Parfitt and Ayers (2009) found that PTSD in mothers was correlated with a higher pathological bond with the baby. Infants of mothers with PTSD FC had poor sleeping and
eating habits when compared to infants of mothers without PTSD FC (McKenzie-McHarg et al., 2015). Mothers with PTSD also viewed their attachment with their babies as less than ideal (Davies et al., 2008).

Because PTSD FC derives from birth, the baby is the source of the trauma, and therefore the mother can react to the baby negatively. For example, the mother could avoid the baby or not want to cuddle and hold the infant, leading to attachment issues. In addition, because the mother may feel the need to avoid the baby, mothers with PTSD choose not to breastfeed more than mothers without PTSD (Ayers et al., 2008). Furthermore, due to the negative cognition of PTSD, the mother could have a negative mood and not smile or laugh with the baby, leading the baby to not trust and not be happy, but instead emulate the negative affect of the mother. This has implications on the child’s health and brain development.

**Still-Face paradigm.** Ionio and Blasio (2014) completed a study that looked at interactions between mother and child. A large part of the study focused on the Still-Face paradigm in which a camera is placed on baby and mom to watch their behavior and response to specific instructions from the researchers such as to look away from baby or look at baby, play with baby, or turn away from baby. The study compared the interactions of mothers with PTSD and their babies to mothers without PTSD and their babies. The Still-Face paradigm was completed three months after delivery. It was found that the babies of mothers with PTSD cried more, had more disorganized behavior, and held an arched bodily position more than babies of non-PTSD mothers during the play-phase of the paradigm (Ionio & Blasio, 2014). It was also found that mothers with PTSD did not look at their child as much, described child negatively, made more noises with their mouths to get
PTSD FOLLOWING CHILDBIRTH

the child’s attention, were further distanced from child, and did not look at the child’s face as much as mothers without PTSD (Ionio & Blasio, 2014). The action of the mother looking away from the child was correlated with the child closing her or his eyes, having tantrums, crying, having an arch position, agitation, and disorganization in mothers with PTSD (Ionio & Blasio, 2014). In conclusion, researchers found that mothers with PTSD show more evading manners towards their children and try to bodily detachment themselves from their child (Ionio & Blasio, 2014).

Couple Relationship Issues

The development of PTSD in a mother has negative implications on the relationship with not only the infant, but also the woman’s significant other. Parfitt and colleagues (2009) found that PTSD in moms has a significant negative correlation to the positivity and satisfaction in the couple relationship. Ayers and colleagues (2009) replicated this and also found that PTSD had a negative affect on the couple’s relationship. The PTSD induces a fear of future conception and going through the process of birth again; therefore, woman avoid sex and intimacy, which affects the couple’s relationship satisfaction (McKenzie-McHarg et al., 2015).

Other Effects

PTSD FC has an effect on future choices concerning children and birth. Many women with PTSD FC either put off having future children for many years or avoid future children completely (Polachek et al., 2015). Those that do choose to have more children ask for more scheduled C-section deliveries (Polachek et al., 2015). This goes back to the woman wanting control of her own body. In addition, the woman wants to avoid going through the same experience again, so instead of chancing any complications or loss of
control, she chooses to avoid the situation completely by not having future children. This can be very difficult emotionally and mentally for the woman because though she may choose not have more children, that does not necessarily mean she does not want more children. Wanting additional children, but being too terrified to have more, can have huge implications on the mother's mental health, the current child's feeling of responsibility of being the reason why she does not want more children, and feelings of helplessness or desire in the father for wanting more children and not being able to do anything about it (Polachek et al., 2015).

Soderquist and colleagues (2006) found that women with PTSD FC perceived having less social support at the birth than those without PTSD regardless of the amount of support that was actually present. Independent of this finding, those with PTSD showed less support over the eleven months following birth than those without PTSD. Social support is important (Cacciatore, 2007). Having support can ease mother's fear, increase sense of control, and decrease sense of loneliness in the experience of childbirth.

Other effects of PTSD in mothers following childbirth can have physical and mental destruction for both mom and those around her. Onoya and colleagues (2009) found that mothers with PTSD FC are more likely to drink heavily, have higher perceived stress, depression, and anxiety. All of these factors affect the women’s ability to mother a newborn properly and in a healthy way as to promote good infant development and attachment. In addition, PTSD can affect hormones in a way that exceeds the normal hormonal changes of new mothers; and can slow the postnatal healing process, have effects on menstruation, menopause, and possible future gynecological surgeries (Ayers et al., 2008). These effects and others have to do with PTSD associated with the genital area and
the sensitivity and privacy of that part of the body. After birth, many women have difficulty viewing themselves and their bodies as positively as before birth, PTSD can exacerbate this and lead mothers to have a strong dislike for themselves and their bodies (Ayers et al., 2008). This can further affect couple relationships, mental stability, and positivity within the household.

**Interventions: Preventions and Treatments**

**Preventions**

Because longitudinal research on PTSD FC has not been widely completed, many preventions of the disorder are recommended but have not undergone actually experimentation or research to decipher the accuracy or effect on the prevalence of PTSD FC. McKenzie-McHarg and colleagues (2015) recommended that it is necessary to increase the knowledge, training, and screening procedures within the medical staff of maternity areas of hospitals. Because PTSD FC is a new area of study, many clinicians and medical staff have either never heard of the disorder or no very little about it. Having trainings on what PTSD FC is, what the predictors are, and possible preventions could decrease prevalence or severity.

Because PTSD FC can effect not only mothers, but fathers as well, and because social support is important during the birthing process, Ayers and colleagues (2008) suggested that the father’s role in pregnancy and the birth be made more significant. With this, both mother and father would be a source of social support for each other.

Since the late 1990’s when PTSD FC first came into view, charities and awareness groups have emerged to increase mindfulness on the subject. One awareness group, the Maternal Mental Health Alliance is based in the United Kingdom and was launched in 2014.
PTSD FOLLOWING CHILDBIRTH

(Maternal). That organization started a movement called *Everyone’s Business* in which the aim is to create awareness and proper facilities to allow all women perinatal mental health care if needed (Maternal). Another organization, called Postpartum Progress, is an awareness group used to connect moms going through perinatal mental health problems (Postpartum).

There are some ways a woman can combat the predictors or decrease the likelihood of having PTSD FC. One of these is attending pregnancy preparation classes to reduce anxiety and fear and increase a sense of control (Denis et al., 2011). Another is to increase the number of prenatal visits because having too few visits is correlated with having PTSD FC (Modarres et al., 2012). Increasing social support and have a solid base of knowledge as to what is going to happen during birth, as well as, the possible complications and what would occur in the incidence of complications are all important ways to increase sense of control for the mother.

**Treatments**

There have been a few suggestions in terms of how to treat PTSD FC, some are similar to treatment of general PTSD, and others are different. One study developed and tested a treatment whose aim was to lower not only PTSD FC symptoms, but also depression and anxiety, as well as, improve attachment and interactions with the new baby (Shaw, Sweester, St. John, Lilo, Corcoran, Jo, Howell, 2013). Participants were women who developed PTSD FC and had infants in the NICU. This treatment was three weeks long and the researchers tested participants prior to the treatment and between 1 and 2 weeks after treatment. The participants had two 45-55 minute sessions per week, two of which were with the baby at the child’s bedside and four were in rooms not near the NICU. The
treatment included education on how to parent and form attachments with a newborn, progressive muscle relaxation was used, exposure therapy was used in terms of having the mother write or talk about the trauma. There was also an education on PTSD and common feelings of parents with babies in the NICU (Shaw et al., 2013). Following the treatment there was a significant reduction in anxiety and also reductions in depression and PTSD symptoms that were not significant (Shaw et al., 2013). This treatment demonstrates a starting point for a regimented treatment plan that will reduce PTSD FC symptoms.

Postnatal debriefing had also been suggested as a treatment type that reduces symptoms of potential PTSD FC. When asked, mothers have said they appreciate the debriefing, but studies have shown either inconsistent or no reductions in prevalence of symptoms (McKenzie-McHarg et al., 2015). Clinicians have advised that it is productive to have an informed discussion of the events with the mother and let the mother ask questions and share her opinions (McKenzie-McHarg et al., 2015). Postnatal debriefing has been banned in the United Kingdom; it is controversial because in terms of general PTSD, research has found that debriefing can actually increase symptoms (McKenzie-McHarg et al., 2015; Rose, Bisson, Churchill, and Wessely 2009). Van Pampus and colleagues (2004) recommended discussing symptoms with women and possible effect of those symptoms to help them regulate and manage symptoms; and also suggest that multiple meetings may be helpful to reduce symptoms. This is an example of a treatment that needs more research but may show differences between PTSD FC and PTSD of other traumas.

As previously mentioned support groups can help not only prevent but treat PTSD FC. Support groups lead to significant reductions in PTSD symptoms, a better connection to others, being able to share experiences, and help coping (Cacciatore, 2007). Allowing the
woman to connect with someone else and no they are not alone is important to combat the want to isolate themselves. Support groups also help women to get advice and help with raising a new baby with PTSD FC.

Another possible treatment for PTSD FC, and for PTSD in general, which has been briefly studied, is eye-desensitization. This form of treatment trains the participant to rapidly move eyes in different directions to reduce the impact that negative memories have on the patient; different motions are used while transferring thoughts from negative to positive memories (Sandstrom, Wiberg, Wikman, Willman, & Hogberg, 2008). Sandstrom and colleagues (2008) completed treatment with four women who had PTSD FC from a previous recent pregnancy, one of which was currently pregnant again, and all had an intense fear of future childbirth. Researchers completed initial assessments, then the treatment, and follow-ups after treatment along with between 1 and 3 years after treatment. All participants had declines of PTSD FC symptoms and the positive effects of the treatment were still present at the longitudinal follow-up (1-3 years) in three of the four women (Sandstrom et al., 2008).

Stramrood, Van der Velde, Doornbos, Paarlberg, Weijmar Schultz, & Van Pampus, (2012) completed eye desensitization on three women who after their first pregnancies had severe complications and developed PTSD FC. During their first birth experiences Patient A had an emergency C-section after a instrumental vaginal delivery failed, Patient B had a vaginal rupture which resulted in not being about to have intercourse for years, and Patient C had severe preeclampsia. All were pregnant again and had intense fear about the upcoming birth. Stramrood and colleagues (2012) completed eye desensitization therapy and even though each patient had severe complications with their second births (A:
emergency C-section; B: another vaginal rupture; C: postpartum hemorrhage) each patient still reported a decrease in symptoms related to PTSD FC. In addition, each patient viewed her second pregnancy and birth experience as a good occurrence (Stramrood et al., 2012). Because both of these studies were on a limited number of participants, it is important for future studies to complete randomized trails with more participants to determine the true effects of eye desensitization.

**Implication and Conclusions**

**Partial Symptomology**

Multiple researchers have suggested that it is important to consider those women who have partial symptomology and are not able to be clinically diagnosed as having PTSD FC but meet multiple subscales. Partial symptomology should not be ignored and those women need to be treated as well (Polachek et al., 2015). 32.1% of participants met at least one subscale of PTSD in two studies (Maggioni et al., 2006; Moghadam et al., 2015). Another study had 21.15% of participants having subclinical forms of PTSD FC (Schwab et al., 2012). Onoya and colleagues (2009) also had 21% of participants meet subclinical PTSD, as did Davies and colleagues (2008). White and colleagues (2006) had 10.5% of participants meet subclinical PTSD. Studies have repeatedly shown that there is a substantial amount of women who do not meet full diagnostic criteria, but are still experiencing symptoms that are affecting their lives.

This evidence has implications on whether PTSD FC should be diagnosed using current diagnostic criteria for other forms of PTSD. If other women’s lives are being affect by symptoms but they cannot receive treatment because they do not meet diagnostic criteria, then this is a problem. With future research, it may be more acceptable to have
PTSD FC as having completely separated diagnostic criteria than other forms of PTSD currently has. Ayers and colleagues (2008) suggested that there is a need for research with long-term follow-ups, screening, and treatment for women without full PTSD FC, but instead have partial criterion.

Conclusion

PTSD FC is different than PTSD from other traumas and different from PPD. It is unique in many ways including the idea that having a child is viewed as a positive event in society and that PTSD FC results in being exposed to the result of the trauma, the child, every day. There has been a lot of research on the predictors of PTSD FC, though there are some contradictions that need to be explored further. The effects are numerous and show how important it is to research PTSD FC and find effective treatments and preventions for this disorder. Many predictors and effects center around the idea that woman is not in control of her body and her baby as she is going through childbirth. It is important to continue research, awareness, and education on this disorder in order to prevent women from going through such a tragic experience.
References


