Post-Traumatic Stress Disorder following Childbirth

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Word count: 3700

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**What is post-traumatic stress disorder?**

Post-traumatic stress disorder (PTSD) is classified among the anxiety disorders in the Diagnostic and Statistical Manual for mental disorders (DSM-IV-TR; APA 2000). The first criterion for diagnosis is that a person has been exposed to a traumatic event in which they experienced, witnessed, or were confronted with actual or threatened death or serious injury, or a threat to their own or others physical integrity. In addition, the person must have responded with intense fear, helplessness, or horror.

Symptoms of PTSD are experienced in the following three ways. First, the individual persistently re-experiences the event by having recurrent and intrusive distressing recollections of the event, distressing dreams of the event, or feeling as if the traumatic event were recurring. This re-experiencing can also involve intense psychological distress or physiological reactivity when the person is exposed to reminders of the traumatic event.

Second, the individual will persistently avoid any stimuli associated with the trauma and will experience numbing of general and emotional responses. These include feelings of detachment or estrangement from others, and a restricted range of emotions. Third, the individual will experience persistent symptoms of increased arousal such as difficulty falling or staying asleep, irritability or outbursts of anger, difficulty concentrating, hypervigilance or an exaggerated startle response. For a diagnosis, patients must report experiencing all three types of symptoms for longer than one month. These symptoms
must also cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

**Childbirth as a traumatic event**

Childbirth is a common event in society so is viewed by most people as “normal”. It therefore may be difficult to understand how it can be traumatic for some women. However, case studies over the last two decades make it clear that women can suffer extreme psychological distress as a consequence of their experiences during childbirth (Ballard et al. 1995; Fones 1996). A small proportion of pregnancies and births involve complications and events that most people would agree are potentially traumatic, such as stillbirth, severe complications, or undergoing medical interventions without pain relief. Other women may have a seemingly normal birth but feel traumatized by aspects such as loss of control, loss of dignity, or hostile or negative attitudes of people around them.

**How many women get PTSD following childbirth?**

Studies suggest the rate of PTSD in women following childbirth is between 1.5 and 5.6%, depending on the time-point at which symptoms are measured (Wijma et al. 1997; Creedy et al. 2000; Czarnocka and Slade 2000; Ayers and Pickering 2001; Soet et al. 2003; Maggioni et al. 2006; White et al. 2006). Lower rates of PTSD are typically found in studies that measure symptoms later in the postpartum period (e.g. six months after birth), and in studies that screen and exclude women who had PTSD in pregnancy (e.g. Ayers and Pickering 2001). Higher rates are found in high-risk groups, such as women who have had late pregnancy loss or stillbirth (Engelhard et al. 2001; Turton et al. 2001).
In addition to full cases, 20% to 30% of women rate birth as traumatic according to DSM IV-TR criteria and a similar number have some symptoms (Creedy et al. 2000; Soet et al. 2003; Maggioni et al. 2006; Ayers et al. 2009). There is evidence that up to 75% of women who have PTSD after birth also have depression (White et al. 2006; Parfitt and Ayers 2008).

A significant proportion of women therefore experience birth as traumatic and up to 5.6% have PTSD after birth. However, several caveats should be noted about the research in this area. Many studies conducted to date have been on small samples of approximately 100 - 200 women. Most estimates have been based on self-report questionnaires, where women report their own symptoms, rather than based on clinical interviews. Several studies report prevalence of the disorder based on symptoms, without screening for other PTSD criteria such as characteristics of the event, disability and impairment. It is therefore possible these estimates of prevalence include women who did not find birth traumatic but had a range of symptoms for another reason. For example, problems sleeping are reported by many women after birth but are counted as a ‘symptom’ of hyperarousal. The overlap between symptoms of PTSD, anxiety, and depression mean these estimates might also include women with general distress or another disorder. In the future, epidemiological studies that use clinical interviews would greatly strengthen the evidence base available.

Who is at risk of PTSD following childbirth?
Risk factors for PTSD after birth can be divided into three types. The first type of risk factor is the individual vulnerability that women may have before giving birth. The second type of risk is constituted by the events of the birth itself and women’s reactions and resources during birth. The third type of risk factor is the environment women are in after the birth.

Some women will be more vulnerable to a traumatic birth because of pre-existing problems. For example a history of psychiatric problems and previous trauma is associated with higher risk of having PTSD after birth (Wijma et al. 1997; Czarnocka and Slade 2000; Kennedy and MacDonald 2002; Soet et al. 2003; Cohen et al. 2004; Cigoli et al. 2006; Maggioni et al. 2006; Soderquist et al. 2006). In particular, a history of sexual trauma is associated with PTSD after birth (Soet et al. 2003; Ayers et al. in press). There is some evidence that women with a history of PTSD will be more vulnerable to PTSD following birth if they have inadequate support and care during the birth (Ford and Ayers, in press).

During the birth, certain complications and events may be more stressful to women than others. Broadly speaking, women have a higher risk of PTSD if they have an emergency caesarean or assisted delivery, although it should be noted that women who have a vaginal birth are still at risk (Soet et al. 2003; Ayers et al. in press). Other obstetric factors have been associated with PTSD symptoms in some studies and not others (e.g. blood loss, length, pain, sum of interventions) (e.g. Tedstone and Tarrier 2003).
Increasingly it is recognised that it is not the objective severity of an event that determines whether a person gets PTSD but the individual’s perceptions of the event and their level of fear (Wijma et al. 1997; Allen 1998; Lyons 1998; Creedy et al. 2000; Czarnocka and Slade 2000; Soet et al. 2003; Cigoli et al. 2006; Maggioni et al. 2006; Ford and Ayers 2009). This has also been demonstrated in relation to birth. For example, women who feel lack of control during birth or who have poor care and support are more at risk of developing PTSD (Lyons 1998; Cigoli, Gilli et al. 2006) as illustrated in the case study shown in Box 1. Furthermore, if a woman is overwhelmed by the experience and copes by dissociating (that is, feeling like she is “not there any more”), she will be at higher risk of PTSD (Olde, Van der Hart et al. 2005).

- insert box 1 about here -

Following the birth, support from friends and family may help women resolve their experiences and recover from a traumatic birth (Wijma, Soderquist et al. 1997; Czarnocka and Slade 2000; Edworthy, Chasey et al. 2008; Ford, Ayers & Bradley, 2010). Conversely, a lack of support may prevent recovery or possibly cause more stress and thereby increase symptoms. The way women appraise or think about the events of birth is also associated with PTSD symptoms (Ayers, Harris et al. 2009). For example, if a woman thinks she was to blame for the events of the birth, that it has changed her as a person, and that she is not safe any more, then her risk of having PTSD symptoms is greater (Ford et al, 2010).

**Is PTSD the same as postnatal depression? …and other common questions**
Several questions are often raised by health professionals about PTSD following childbirth. For example, is PTSD the same as postnatal depression? Can childbirth really be considered a trauma like other events such as military combat or natural disasters? Is the presentation of the disorder the same as PTSD following these other events? And finally, is it caused by women having too high expectations about birth?

Firstly, PTSD after any event has a different symptom profile to depression. Trauma symptoms are focussed on the traumatic event (re-experiencing it, avoiding reminders of it) and a diagnosis of PTSD is not possible without the gateway criterion of a traumatic event. This is not the case with depression. The cause and symptoms of PTSD are therefore conceptually distinct from those of postnatal depression, although in practice symptoms overlap and the majority of women report both depression and PTSD. It is probable that symptoms of PTSD precede those of depression but research has not examined this directly. Effective treatments for PTSD and depression differ. Recommended treatment for PTSD is psychotherapy, and only chronic or complex cases of PTSD benefit from SSRI anti-depressants.

A common scepticism about PTSD as a diagnosis for women following birth is that birth cannot be considered a traumatic event because the majority of women have a broadly positive experience and enjoy the birth of their new baby. Birth is also viewed positively by society, pregnancy is often planned, voluntarily entered into, and the birth of the baby positively anticipated. However, despite this, labour and delivery are challenging and stressful for many women. Furthermore, there are substantial social and physiological
changes and adjustments that women have to deal with after birth, in addition to the physical and emotional demands of caring for an infant. These factors may impede emotional recovery from a stressful birth and increase postnatal symptoms of distress.

A potential problem when looking at PTSD after birth is that symptoms of the disorder may be inflated by normal postnatal ‘symptoms’ such as tiredness and reduced sexual function. There is some support for this view. Symptoms of hyperarousal are high in postnatal women so are probably affected by factors such as tiredness and sleep disturbances. In contrast, symptoms of avoidance and numbing are less frequent. This might be because the baby and routine postnatal health checks make it difficult for women to avoid reminders of the birth. This is particularly important to consider if we are to develop appropriate screening tools. A recent study examined the presentation of PTSD in over 1400 postnatal women and concluded that symptoms alone are not a good indicator of PTSD. They recommended either screening for full diagnostic criteria or focusing on impaired functioning and disability in everyday life. Interestingly, this study found that symptoms after birth form two clusters. The main cluster of symptoms was emotional numbing and arousal symptoms; and the second cluster was re-experiencing and avoidance symptoms. Emotional numbing and arousal were more strongly associated with other symptoms of depression and anxiety. These symptoms are also those that potentially have the greatest impact on relationships, such as feeling distant and cut off from people around you (emotional numbing), and feeling angry and irritable (arousal).
The final question that is often asked is whether women have too high expectations of birth and this contributes to them being traumatised when birth does not go as expected. The evidence on this is inconsistent, although methodologically rigorous studies point towards it not being the case. Firstly, two studies have found that women’s expectations are positively associated with their experiences (Slade, MacPherson et al. 1993; Ayers 1999). That is, if a woman has broadly positive expectations she is more likely to have a positive experience. Secondly, if unrealistic expectations were linked to PTSD we might expect to find more cases in first time mothers. This effect has been found (Wijma, Soderquist et al. 1997) but subsequent analysis suggests it is due to the higher rate of intervention in these women (Soderquist, Wijma et al. 2002). Finally, one study looked at this question directly and found that a difference between expectations and experience in the level of pain, length of labour, interventions and level of control was not associated with PTSD symptoms. However, a difference between expected support from health professionals and the level of care experienced was predictive of PTSD symptoms (Ballard, Stanley et al. 1995; Ford and Ayers unpublished). It therefore seems that women are not necessarily traumatised by the events of birth not happening as they expected, but are affected when the care they receive does not match their expectations.

**What are the implications of PTSD following childbirth?**

PTSD after birth has various implications for women and their families. In addition, our current knowledge of PTSD following childbirth has implications for clinical care during pregnancy, labour and after birth; and for screening and treatment. These are examined in turn.
**Implications for women and their families**

The implications of PTSD on women and their families have not been widely researched. Available evidence is primarily from case studies and in-depth interviews. Case studies suggest that women who have a traumatic experience of childbirth can suffer for years with PTSD symptoms and their consequences. These reports suggest women have feelings of anger and that the relationship with the baby can be severely affected, at least initially (Fones 1996). Women may avoid sex with their partner because of fear of a subsequent pregnancy (Ayers, Eagle et al. 2006). Recent qualitative studies suggest that PTSD has a negative effect on the woman’s relationship with her partner, resulting in anger, disagreements, blame and sexual dysfunction (Ayers, Wright et al. 2007), although quantitative studies do not borne always bear this out (Parfitt and Ayers 2008). One quantitative study showed that PTSD symptoms had a direct effect on the parent-baby bond but not on the couple’s relationship, which was more affected by depression (Nicholls and Ayers). It is not known what effects PTSD has on child development, although research is underway to investigate this.

A couple of studies suggest men may also be at risk of PTSD if they attend their baby’s birth and find it traumatic. Early estimates are that fewer men develop PTSD than women and qualitative research suggests PTSD may be likely to occur together in both members of a couple (Nichols & Ayers, 2007).
**Implications for maternity care**

Research in this field is at an early stage and more needs to be done before making policy recommendations. However, the body of evidence points towards several considerations. Firstly, some women enter pregnancy and birth with existing risk factors for this disorder, and these women may need particular care. Health professionals should be aware that women with a history of trauma, abuse (particularly sexual abuse) and psychiatric problems are at higher risk of PTSD symptoms following birth. There is some evidence that a lack of support during the birth may put these women at particular risk (Kessler, Sonnega et al. 1995).

Secondly, the general PTSD literature shows that interactions with other people have a strong effect on PTSD. For example, PTSD is more likely following events which are perceived to have been intentionally perpetrated rather than following accidents (Charuvastra and Cloitre 2008). PTSD is also associated with low support after the event, maladaptive relationship styles and poor feelings of security (McGrath, Kennell et al. 1998; Hodnett, Gates et al. 2003). This effect of interpersonal relationships and care is particularly relevant to childbirth. There is substantial research showing support during labour and birth improves both physical and psychological outcomes (Czarnocka and Slade 2000; Soderquist, Wijma et al. 2002; Soet, Brack et al. 2003; Cohen, Ansara et al. 2004; Olde, Van der Hart et al. 2005; Cigoli, Gilli et al. 2006; Engelhard, van den Hout et al. 2006; Maggioni, Margola et al. 2006; Lemola, Stadlmayr et al. 2007), and that perceptions of inadequate support and care are predictive of traumatic stress responses. In anecdotal reports of birth, women who feel traumatised often describe negative
interactions with staff such as feeling rushed, bullied, judged, ignored or put off when asking for pain relief (e.g. www.birthtraumaassociation.org.uk). Understanding the importance of support helps explain why, for example, level of pain is not consistently associated with PTSD symptoms. It may not be the level of pain, per se, which is traumatising for women, but the experience of unbearable pain in combination with the perception of being denied pain-relief by an uncooperative caregiver. Women also report caregivers proceeding with interventions, such as forceps deliveries or episiotomies, without consent when the woman has clearly expressed her wish not to have the intervention. Negligent care such as leaving women naked in stirrups with the door open can be intensely degrading and stressful. This anecdotal evidence suggests that many of the traumatising aspects of childbirth could be reduced with consistent and considerate care from maternity staff. This is incorporated into the guidelines for maternity care provided by the Birth Trauma Association which are summarised in Box 2.

- insert Box 2 about here -

**Implications for screening and treatment**

There is currently no recognised screening tool for postnatal PTSD and women are not routinely screened for this disorder. In the UK, postnatal women are generally under the care of their doctor and health visitor. Lack of information about PTSD following childbirth means health professionals may not recognise it or distinguish it from postnatal depression. Therefore women with PTSD may be diagnosed with depression and given anti-depressant medication, which is unlikely to treat the PTSD effectively. Treatment for PTSD usually involves targeted psychotherapy, such as cognitive behavioural therapy.
(CBT) or eye movement desensitisation reprocessing (EMDR). Future directions for research in this area should encompass developing appropriate screening tools and increasing awareness of PTSD in front-line healthcare services for postnatal women.

Summary
Childbirth can be a stressful event for many women, and up to 30% of women rate it as traumatic according to PTSD traumatic event criteria. Up to 5.6% of women who give birth will have PTSD as a result of this experience. Women are at higher risk if they have a history of trauma, abuse or psychiatric problems. During birth, women’s perceptions of the birth, and particularly of the care they receive, are more important in determining their trauma reaction than the type of birth or the number of interventions. Following the birth, support from friends, family and health professionals may help women recover from a traumatic birth. Women who have PTSD following birth can suffer from symptoms for many years if they are not diagnosed and treated. Currently, PTSD following childbirth is under-recognised by health professionals. Simple changes in maternity care during labour and birth, the introduction of screening tools for PTSD, and increased education about PTSD for health professionals who meet pregnant and postnatal women may help reduce incidence of this disorder and enable women who do suffer from it to recover more quickly.

Further Reading
The Birth Trauma Association has an informative website with more information on this disorder and a range of birth stories (www.birthtraumaassociation.org.uk).
Bibliography


Box 1: Case Study of a Traumatic Birth

Claire laboured at home all day with her partner, coped really well with the pain and managed to keep mobile. In the evening she went to the hospital and got in a birthing pool. Labour progressed well, but after pushing for 2½ hours (without being assessed) she was exhausted and in a lot of pain, so asked for more help.

A female doctor came in to help, but came across in a rude and patronising manner. She did not talk to Claire but put her legs in stirrups and removed the bottom of the bed. She did not assess Claire’s pain relief. She didn’t once address Claire by name or acknowledge Claire’s partner. She announced as she was putting Claire’s legs in stirrups that she was going to try a ventouse delivery. She did not explain why she thought Claire needed an instrumental delivery and didn’t give any pain relief. Claire didn’t give consent for an operative delivery.

While Claire screamed in pain the doctor attempted a ventouse which failed. She then administered a very painful local anaesthetic to do an episiotomy, put the forceps in and all tried to pull the baby out. Claire was in agony, but the doctor kept shouting at Claire to be quiet and to close her mouth. After a horrific 45 minutes of pulling somehow the head was delivered. After delivery, Claire had a post partum haemorrhage and her vagina was packed with dressings (still with no pain relief) to try to slow the bleeding. They handed the naked and bloody baby to Claire’s partner and left him alone in the delivery room, standing in all the blood Claire had lost.

They rushed Claire to theatre. It took three doctors an hour and 20 minutes to stitch her up and nobody told her what was happening. The only time any doctor spoke to her throughout the entire birth was at the end of the operation when a doctor who Claire didn’t know said to her that they had stitched her up and that she might now be incontinent of urine, faeces and flatus.

It took Claire a year to learn to be touched again. She has not been able to have sex since the birth, and she had a panic attack when she had to go to the hospital to collect her notes. She was not able to go to an appointment at the perineal repair clinic because of anxiety, and is still suffering from incontinence.
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<td><strong>Box 2. Guidelines for preventing traumatic birth (Birth Trauma Association)</strong></td>
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<td><strong><a href="http://www.birthtraumaassociation.org.uk/policy.htm">http://www.birthtraumaassociation.org.uk/policy.htm</a></strong></td>
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<td><strong>1. Women must be fully informed of their options, of details of obstetric procedures, and their associated physical and psychological risks.</strong></td>
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<td><strong>2. The woman must be central to the decision making process.</strong></td>
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<td><strong>3. Women need to be presented with their choices in plain English and allowed to make their own decisions.</strong></td>
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<td><strong>4. Women need to be given as much time as possible to talk through their decision with appropriately qualified staff.</strong></td>
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<td><strong>5. The woman and her partner should be treated sensitively. Their decisions should be supported appropriately.</strong></td>
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<td><strong>6. Care should be individualized; this includes pain relief provision and complete information about the well-being of their baby because fear and lack of trust are commonly associated with later traumatic experiences.</strong></td>
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