

Knowledge, Beliefs and Attitudes of Health Visitors  
In Relation to Postnatal Post-traumatic Stress Disorder:  
A Qualitative Investigation

Thesis submitted in partial fulfilment for the requirements of the  
Doctorate in Clinical Psychology

Submitted 21<sup>st</sup> May 2010

By

Joanna Darby, Trainee Clinical Psychologist

School of Psychology – Clinical Section

University of Leicester

## **Statement of Originality**

I confirm that this is an original piece of work. The literature review and research report contained within this thesis have not been submitted for any other degree, or to any other institution.

© Joanna Darby 2010.

This thesis is copyright material and no quotation from it may be published without proper acknowledgement

## **Thesis Abstract**

**Title:** Knowledge, beliefs and attitudes of health visitors in relation to postnatal post-traumatic stress disorder: A qualitative investigation  
Joanna Darby, Trainee Clinical Psychologist

### **Part One: Literature Review**

*Background:* Women may experience birth-related PTSD and research has begun to examine the potential effects of this disorder on infant development. This article aimed to review that evidence.

*Method:* Three databases were systematically searched.

*Results:* 8 articles met inclusion criteria. The variables examined were categorised into mother-infant attachment, children's temperament and parenting behaviour.

*Conclusions:* The review highlighted a dearth of rigorously conducted research in this area. However, the articles provided limited evidence to support the claim that aversive birth experiences/PTSD can lead to less optimal parent-infant bonding and difficulties with infant temperament. Although tentative, these conclusions suggest professionals working with families postpartum should be alert for the possible impact of aversive birth experiences on their parent-infant bond and the infant's temperament.

### **Part Two: Research Report**

*Background:* The traumagenic potential of childbirth is well-documented but no research has examined the way in which professionals understand birth-related trauma. Given the potential impact of these understandings for women's care, this research aimed to explore the knowledge, attitudes and beliefs of health visitors regarding birth-related PTSD.

*Method:* Three focus groups and three interviews were conducted with health visitors and their managers. Verbatim transcripts were analysed using template analysis.

*Results:* Analysis highlighted two routes by which participants perceived birth could result in distress. The first emphasised qualitative aspects of a birth as traumagenic, whereas the second began with a 'normal' birth but was experienced as traumatic due to other circumstances.

*Discussion:* Although much of the phenomenology described by participants was commensurate with that in the literature, a notable discomfort with the term 'PTSD' and a lack of emphasis on the role of meaning suggested participants may have lacked theoretical understanding of PTSD. Clinical implications of these findings are described.

### **Part Three: Critical Appraisal**

Reflections on the overall research process are provided.

(Word count = 300)

### **Acknowledgements**

Firstly I wish to thank all those who took the time to participate in this research; it obviously would not have been possible without them. Secondly my very grateful thanks go to my supervisors Dr Noelle Robertson and Dr Joanne Herdman for all their help, guidance and support. Finally my thanks to my family and friends who have cheered me along and to Marcus, who could not have done more.

## Word Counts

<b>Part One: Literature Review</b>	5184
References	1162
<b>Part Two: Research Report</b>	13337
References	1237
<b>Part Three: Critical Appraisal</b>	4987
References	203
<b>Appendices</b>	2878
<b>TOTAL</b> (excluding references)	23508
(including references, tables and appendices)	28988

## **Contents**

<b>Thesis Abstract</b>	<b>3</b>
<b>Acknowledgements</b>	<b>4</b>
<b>Word Counts</b>	<b>5</b>
<b>Contents</b>	<b>6</b>
<b>Lists of Tables</b>	<b>8</b>
<b>List of Figures</b>	<b>9</b>
<b>Part One: Literature Review</b>	<b>11</b>
Abstract	12
1. Introduction	13
2. Method	16
3. Results	17
4. Discussion	30
References	41
<b>Part Two: Research Report</b>	<b>50</b>
Abstract	51
1. Introduction	53
2. Method	61
3. Results	70
4. Discussion	90
References	105

<b>Part Three: Critical Appraisal</b>	114
References	133
<b>Appendices</b>	<b>135</b>
Appendix A	Instructions for Authors
Appendix B	Criteria for PTSD
Appendix C	Data Extraction Proforma
Appendix D	Methodological Evaluation of Papers
Appendix E	Names and References of Measures
Appendix F	Stance of Researcher
Appendix G	Details of Participants
Appendix H	Ethical approval
Appendix I	Data Collection Procedure
Appendix J	Information for Participants
Appendix K	Interview Schedules
Appendix L	Transcript Decisions and Conventions
Appendix M	Example of Coding
Appendix N	Changes to template
Appendix O	Final Template
Appendix P	Interactions Template
Appendix Q	Instructions for Authors
<b>Addenda</b>	

## List of Tables

### Part One: Literature Review

Table 1. Main characteristics of papers reviewed	18
---	----



## **List of Figures**

### **Part Two: Research Report**

Figure 1. Model of participants understanding of traumatic birth experiences	72
---	----

## **Part One: Literature Review**

Impact of Birth Experience on the Infant:

*A systematic review*

## Abstract

*Title:* Impact of Birth Experience on the Infant: A systematic review

*Author:* Joanna Darby, Trainee Clinical Psychologist

*Introduction:* The negative impact of maternal depression on early child development has been well-documented. However, it is also recognised that women may experience birth-related PTSD and research has begun to examine the potential effects of postnatal PTSD on infant development. This article aimed to review that evidence.

*Method:* A systematic search of the PsycINFO, Ovid MEDLINE (R) and Web of Science (WoS) databases was conducted for original articles evaluating the effects of a negative birth experience or birth-related PTSD on the infant and/or parent-infant relationship.

*Results:* Of 6341 articles retrieved, 8 met inclusion criteria. The variables examined were categorised into mother-infant attachment, children's temperament and parenting behaviour.

*Conclusions:* The review highlighted a dearth of rigorously conducted research in this area. However, the articles provided limited evidence to support the claim that an aversive birth experience or birth-related PTSD can lead to less optimal parent-infant bonding and difficulties with infant temperament. There is currently an absence of evidence for any effect of birth experience/PTSD on parenting behaviours unrelated to bonding and attachment. Although tentative, these conclusions suggest professionals working with families postpartum should be alert for the possible impact of aversive birth experiences on their parent-infant bond and the infant's temperament.

**Keywords:** childbirth, PTSD, experience, parenting, mother-infant bond, temperament

**Target Journal:** Journal of Reproductive and Infant Psychology

## 1. Introduction

### 1.1 Postnatal PTSD

In recent years it has been recognised that women and their partners may experience post-traumatic stress disorder (PTSD) as a result of adverse experiences during childbirth (see Appendix B for diagnostic criteria for PTSD). Prevalence of traumatic birth experiences and postnatal PTSD suggests that approximately one third of women appraise the birth as traumatic at four to six weeks postpartum, while at six weeks postpartum between 2.8-5.6% of women have a PTSD-profile<sup>1</sup> and at six months postpartum 1.5% of women fulfil the criteria for a formal diagnosis of PTSD (Olde, van der Hart, Kleber & van Son; 2006). Projecting from the 690,013 live births recorded in England and Wales in 2007 (ONS, 2008) would suggest that more than 10,000 women could meet the criteria for PTSD at six months postpartum.

In addition to the distress associated with symptoms of PTSD a number of more generalised and longer term effects of a traumatic birth have been identified, such as sexual avoidance (Fones; 1996) and fear of subsequent childbirth (secondary tokophobia; Hofberg & Brockington, 2000). Secondary tokophobia appears associated with requests for a caesarean section (Ryding; 1993) or a termination if women accidentally conceive (Goldbeck-Wood; 1996) in an attempt to avoid further trauma. Women who experience a traumatic first birth have also been shown to have fewer subsequent children or wait longer before having a second child than women who have a positive first birth experience (Gottvall & Waldenström; 2002).

---

<sup>1</sup> This refers to cases where women reported experiencing symptoms from all three clusters (criteria B, C and D) but were not assessed for criteria A, E or F.

Furthermore, mothers' abilities to mediate between their infants and the social environment may be compromised by a negative birth experience, with possible adverse effects on the infant. The effects on infant outcomes of other postnatal mental health disorders, in particular postnatal depression (PND), have been widely investigated and are summarised below. Although evidence suggests that PND and postnatal PTSD are distinct disorders, there is considerable symptom overlap and evidence of substantial co-morbidity (e.g. White, Matthey, Boyd & Barnett; 2006), although a diagnosis of one does not imply presence of the other. Infants of mothers with postnatal PTSD may thus experience similar outcomes to infants whose mothers experience PND.

## 1.2 Postnatal Depression, PTSD and Infant Outcomes

Several literature reviews have concluded that PND adversely affects children's cognitive, emotional and behavioural development, mother-infant interactions and attachment. A meta-analysis of nine papers found the effects of PND on children's cognitive and emotional development in their first year to be universally adverse (Beck; 1998). Other reviews concluded that mothers with PND had difficulties responding to their baby in social interactions (Murray, Cooper & Hipwell; 2003) and that the mother-infant relationship improved in all eight trials examining the effect of treating PND, although there was less evidence of benefits for children's cognitive development (Poobalan et al; 2007). These reviews also highlighted that age and gender of the child (Beck, 1998; Grace, Evindar & Stewart, 2003) and current levels of maternal depression (Beck; 1998) could influence the degree to which PND affected child outcomes.

The limited literature examining the effect of parental PTSD on children comes mostly from examination of war veterans (fathers) and domestic violence (mothers). In

fathers with combat-related PTSD, greater symptom severity appeared related to greater distress in their children, with fathers being more overprotective, controlling and demanding of their children (Dekel & Goldblatt; 2008). In mothers subjected to domestic violence, maternal PTSD symptom severity was a significant predictor of a child's negative and labile emotion scores and accounted for a significant amount of variance in the child's behaviour (Samuelson & Cashman; 2008), whereas the extent to which a child witnessed domestic violence and the extent to which a child was maltreated did not predict their scores on these two domains.

### 1.3 The Current Review

Research into PND, and PTSD resulting from other traumatic incidents, seems to indicate that both can adversely affect attachment, infant and child development and parenting in a number of domains. The considerable overlap in symptoms between PND and postnatal PTSD (Bailham & Joseph; 2003) and the obvious similarities between PTSD and postnatal PTSD, suggests postnatal PTSD may also affect these outcomes. However, this cannot be assumed because there are also important *differences* between postnatal PTSD and PND and the aforementioned research relating to PTSD pertains to older children, not infants. Although many women who appraise birth as traumatic will not develop PTSD, research has shown that their lives may still be negatively influenced by the experience (e.g. Gottvall & Waldenström; 2002), with potential for these experiences to influence attachment, parenting and infant development.

This review therefore aims to collate and evaluate the evidence examining whether parenting, attachment and infant development are affected by a negative birth experience and/or postnatal PTSD.

## 2. Method

A systematic search of the literature was conducted in December 2009 using the PsycINFO, Ovid MEDLINE (R) and Web of Science (WoS) databases. The search was limited to articles published from 1970 onwards, written in English and conducted with ‘human’ subjects (this limit was not possible within WoS). Dissertations and book chapters were excluded. Abstracts were searched using the search terms ‘birth OR labour OR delivery’, ‘trauma\* OR percept\* OR experienc\* OR apprais\* OR satisf\*’ and ‘child\* OR infant\* OR bab\*’. Searches were combined using the AND operator to identify research that investigated the effects of a negatively appraised or traumatic birth on the infant and/or the parent-infant relationship, yielding 6341 articles after duplicates had been removed.

Titles and abstracts of identified papers were reviewed to exclude articles that did not report original research, used premature infant-mother dyads, did not include a measure of either maternal appraisals or a measure of traumatic reaction to the birth, and did not include a measure of at least one of the following outcomes: the mother-infant relationships, attachment and/or interactions; child behaviour or infant/child development; or parenting behaviour. Finally, articles that did not examine the relationship between birth experience and the infant outcomes were excluded. This left a total of five papers to be reviewed. To identify further relevant articles, the reference sections of these five papers were hand-searched and the PsycINFO, MEDLINE and WoS databases were searched for papers that cited them. This process was repeated with any newly identified papers, leading to identification of a further three papers. A total of eight papers were reviewed, aided by the data extraction form (Appendix C) and the



methodological rigour of each study was assessed using an adapted version of the scoring system developed by Beck (1998; see Appendix D). If necessary information was not included in the paper then the authors were contacted to request it.

### 3. Results

#### 3.1 Characteristics of the Studies

The main characteristics of the eight identified studies are summarised in Table 1. Studies utilised either between group or correlational designs and a total of 2240 mothers and 1205 fathers were included in the studies. Two studies included birth of the infant at 37 or more weeks gestation as a criterion for inclusion (Mercer, 1985; Bryanton, Gagnon, Hatem & Johnston, 2009) and the remaining six studies did not specify the gestational age of the infant at birth (Ayers, Wright & Wells, 2007; Parfitt & Ayers, 2009; Rautava, Helenius & Lehtonen, 1993; Durik, Shibley Hyde & Clark, 2000; Peterson & Mehl, 1978; Davies, Slade, Wright & Stewart, 2008).

#### 3.2 Methodological Features

Methodological rigour of the studies overall was not particularly robust. Many studies relied on parental report to assess outcome variables and failed to assess maternal mental health at the time of assessing outcome variables. In those studies that did not assess or control the potential impact of other mental health difficulties it is difficult to establish whether the results were due to the birth experience/PTSD or to concurrent maternal mental health problems. Results based on maternal report about the child's behaviour or the mother-infant relationship are potentially problematic due to the possible influence of the 'depression-distortion effect' (i.e. that mothers with depression over-report problematic behaviour in their children; Richters & Pelligrini, 1989).

<b>Authors</b>	<b>Year; Country</b>	<b>Details of participants</b>	<b>IV; Method of assessing IV; timing of assessment</b>
<b>Attachment</b>			
S1 Ayers et al.	2007; UK	64 cohabiting/married/ long-term couples with baby 6-12 weeks old.  Age: couples 18-52 years (mean 32.4yrs); Mixed parity	PTSD & birth experience; IES and EBS; 9 weeks postpartum
S2 Parfitt & Ayers	2009; UK	126 women; Age: 19-45yrs (mean 30.92yrs); 67% primiparous  26 men; Age: 22-54yrs (mean 32.58yrs)	PTSD; PDS + 3 questions about birth (not used in analysis); between 1 and 24 months postpartum
S4 Bryanton et al	2009; Canada	80 mothers reporting a negative birth experience.  95 mothers reporting a positive birth experience  Age: sample mean 28.5yrs; 38.9% of sample primiparous	Birth experience; QMAALD; 12-48 hours postpartum
S6 Durik et al	2000; USA	75 women who delivered vaginally; 37 women who delivered by planned CS; 56 women who delivered by unplanned CS; Age: total sample 20-41yrs (mean 30yrs);	Birth experience; 10 statements about delivery experience; 1 month postpartum

		Mixed parity	
S7 Peterson & Mehl	1978; USA	21 mothers having a 'natural childbirth' without anaesthesia in hospital; 13 mothers having a 'natural childbirth' without anaesthesia at home; 12 mothers delivering under anaesthesia in hospital; Mixed parity	Birth experience; observation and interview of mother; during and immediately after delivery
S8 Davies et al	2008; UK	158 women non-symptomatic(NS) at 6 weeks postpartum (age: mean 30.21yrs); 45 women partially symptomatic (PS) at 6 weeks postpartum (age: mean 30.40 yrs); 8 women fully symptomatic (FS) at 6 weeks postpartum (age: mean 26.12yrs); 55% of sample primiparous	PTSD; PTSDQ and IES; 6 weeks postpartum
<b>Child temperament</b>			
S5 Rautava et al	1993; Finland	1115 fathers. Age: 17-49yrs (mean 27.9yrs) 1208 mothers. Age: 16-42 yrs (mean 25.4yrs); Nulliparous	Birth experience; Self-report questionnaires; not stated
S8 (as above)	2008; UK	As above	As above

<b>Parenting behaviours</b>			
S3 Mercer	1985; USA	Gp1 40 mothers aged 15-19 yrs; Gp 2 113 mothers aged 20-29yrs; Gp 3 88 mothers aged 30-42yrs; Primiparous.	Birth experience; Adapted version of a self-report questionnaire; not stated
S4 (as above)	2009; Canada	As above	As above

<b>Study no.</b>	<b>Method of outcome assessment; tool used; time point(s)</b>	<b>Impact of IV on outcome(s)</b>	<b>Additional variables related to outcomes</b>
<b>Attachment</b>			
S1	Parental report; Bethlehem Mother-Infant Interaction Scale; 9 weeks postpartum	No significant correlations between parent-baby bond and either PTSD symptoms or birth experience	Correlation between relationship variables and father-infant bond
S2	Parental report; PBQ; Between 1-24 months	Mean PBQ score of parents with PTSD (n=31) significantly higher than mean score of parents without	Significant correlation between parent-baby bond and depression and parent-

	postpartum (mean 10.76 months postpartum)	PTSD, indicating more pathology.  Significant correlation between PTSD and parent-baby bond. SEM showed direct effect of PTSD on parent-baby bond.	baby bond and couple's relationship
S4	Observations; NCAST Feeding Scale; infant 1 month old	Perception of the childbirth experience did not predict total score on the NCAST Feeding Scale.	NCAST feeding score predicted by education and associated with partner and family support
S6	Observations; PCERA scales; infant 4 and 12 months old	Appraisal of the birth experience accounted for significant amount of variance in maternal negative affect and behaviour. Birth appraisal mediated the effect of delivery type on maternal affect and behaviour in women with low neuroticism at 4 months postpartum.  No effect at 12 months postpartum	-
S7	Interviews & observations; coded	Whole sample; birth experience was the second most important variable for predicting variance in the	Whole sample; mother-infant separation, length of labour and

	<p>according to criteria selected by authors;</p> <p>infant 1 week, 1, 2, 4 &amp; 6 months old</p>	<p>maternal attachment.</p> <p>Sample of mothers who had a natural childbirth in hospital; birth experience was the most important variable in predicting variance in the maternal attachment.</p> <p>Sample of mothers who had a natural childbirth at home; birth experience was the only variable that predicted variance in maternal attachment.</p>	<p>prenatal attitude predicted attachment score. Mothers giving birth under anaesthesia in hospital;</p> <p>disappointment predicted maternal attachment.</p> <p>Mothers having a natural childbirth in hospital; length of labour and mother-infant separation predicted attachment.</p>
S8	<p>Maternal report; MORS-SF and MPAS; 6 weeks postpartum</p>	<p>Mean scores on Warmth and Invasion subscales in the FS and PS groups were significantly greater than in the non-symptomatic group.</p> <p>Mean scores on the Quality of attachment and Absence of hostility scales for the PS group significantly greater than NS group</p> <p>Mean scores on the Quality of attachment, Absence of</p>	<p>When controlling for depression only significant main effect for the Warmth scale remained</p>

		hostility and Pleasure in interaction scales for the FS group significantly greater than NS group.	
<b>Child temperament</b>			
S5	Parental report; rate level of colic on 5 point scale; infant 3 months old	<p>Infants had more colic if the mother had a negative delivery experience. A negative birth experience contributed an independent effect in stepwise multiple regression analysis</p> <p>Infants more likely to have colic if father was disappointed with the birth and he construed his partner's delivery was painful</p>	<p>Mother disappointed with being a woman; worsening of sexual relationship after the birth; father being socially isolated; mother experiencing stress during pregnancy; sick leave during pregnancy; work rated as more stressful during pregnancy; mother on sick leave at 28 weeks pregnancy; father felt not worth being at delivery; mother's perception of symptoms; need for outside help all contributed independent effect</p>

S8	Maternal report; ICQ; 6 weeks postpartum	<p>Mean scores on the Unadaptable, Fussy/difficult and Total difficulty scales for PS group significantly greater than NS group.</p> <p>Mean scores on the Dull, Fussy/difficult and Total difficulty scales for FS group significantly greater than NS group.</p>	When controlling for depression, no significant main effects remained
<b>Parenting behaviours</b>			
S3	Interview & observation; adapted version of MBS; 1, 4, 8 & 12 months postpartum	<p>Childbirth experience significantly correlated with mothering behaviours for Group 1 at all time points, for Group 2 at all time points except 8 months and for Group 3 at no time points.</p>	Group 1 consistently scored lower on mothering behaviours at all time points compared to Groups 2 and 3.
S4	Maternal report; PPQ; infant 1 month old	Perception of childbirth experience not a significant predictor of exclusive breastfeeding or protection from harm	Education/type of birth predicted exclusive breastfeeding at 1 month and mental health of mother was significantly associated with it.



			Significant association between partner support and protection from harm.
--	--	--	---

Table 1. Main characteristics of papers reviewed (See Appendix E for full names and references of birth experience/PTSD and outcome variable measures)

Finally, the lack of assessment of reliability and validity of assessment tools (for independent and dependent variables) also compromises confidence in the conclusions drawn by this review.

Findings from the eight studies will now be summarised in three sections according to the outcome assessed. As the studies used a variety of terms to describe the dependent variables, categories were developed on the basis of information about the aims of each study and how the outcome was operationalised (i.e. the measurable behaviour being assessed). These classifications were developed through discussions between the reviewer and another experienced clinician working in postnatal mental health. Studies categorised as ‘mother-infant attachment’ include those that assessed maternal and infant behaviours, experiences/feelings reflecting variables considered by the reviewers to be indicative of mother-infant attachment (e.g. warmth of the mother-infant relationship, maternal sensitivity and mother’s attentiveness to her infant). The results of those studies assessing ‘children’s temperament’ are then presented, followed by studies which assessed ‘parenting behaviour’. This final category included studies which assessed care-taking behaviours or those required to keep the infant safe (e.g. use of a smoke alarm) but which were not considered to reflect or rely on quality of the mother-infant attachment. Some studies analysed outcomes in more than one category, for which the results are reported in the relevant sections.

### 3.3 Mother-infant Attachment

Six studies assessed the impact of the birth experience/PTSD on the quality of the mother-infant attachment or the presence of behaviours and/or feelings that related to or promoted attachment (Ayers et al., 2007; Parfitt & Ayers, 2009; Bryanton et al., 2009;

Durik et al., 2000; Peterson & Mehl, 1978; Davies et al., 2008). Of the two studies that did not report significant results, Ayers et al. (2007) had one of the lowest scores for methodological rigour, whereas Bryanton et al. (2009) had one of the highest scores. Ayers et al. (2007) was one of three studies reviewed here to investigate fathers as well as mothers, although this may have contributed to their low response rate (31%) as both members of the couple had to return completed questionnaires to be included.

Of the four studies that reported significant results, two assessed the impact of maternal symptoms of PTSD on mother-infant attachment (Parfitt & Ayers, 2009; Davies et al., 2008) and two assessed the impact of the birth experience (Durik et al., 2000; Peterson & Mehl, 1978).

Davies et al. (2008) analysed differences in mother-to-infant attachment between mothers' who were classified as fully symptomatic for PTSD, partially symptomatic and non-symptomatic. As well as looking at overall effects, Davies et al. (2008) separately examined the impact of the three core PTSD symptom clusters (re-experiencing, avoidance and increased arousal) on each outcome subscale. All clusters showed significant correlations with all subscales except for a non-significant correlation between pleasure in interaction and the subscale of 're-experiencing'.

Parfitt and Ayers (2009) reported a significant effect of PTSD on parent-baby bond, although the effect size was small (0.20) and very similar to the effect of depression on the parent-baby bond (0.18) which was appraised as non-significant. Additionally, PTSD, depression and the quality of the parental relationship together only accounted for 16.6% of the variance in the parent-baby bond.

The final two studies in this category analysed effects of mothers' perceptions of the birth (Durik et al., 2000; Peterson & Mehl, 1978). Durik et al. (2000) only analysed the mediating role of delivery appraisal on maternal positive and negative affect and behaviour at four months (although they collected data on a variety of maternal and infant behaviours). Analysis revealed that women low on neuroticism, who had an unplanned caesarean section and appraised the birth negatively, showed the most negative affect and behaviour when interacting with their infants at four months postpartum. Appraisal of the birth accounted for 7.8% of the variance in negative maternal affect and behaviour, which although significant, leaves substantial amounts of variance unexplained.

Peterson and Mehl (1978) divided their participants into three groups according to type of childbirth. Although two groups comprised women having a 'natural' delivery, the authors did not state what this constituted. This was the only study not to rely solely on women's self-report to assess birth perception; the authors developed a score based on mothers' reports about a number of aspects of the labour, delivery and immediate post-birth period as well as observations of her behaviour. This study appeared to use a particularly homogenous sample (all participants were from ethnic majority and middle-to upper-class socioeconomic backgrounds).

### 3.4 Children's Temperament

Both studies assessing outcomes regarding infants' temperament reported some significant results, although one used childbirth experience as the dependent variable (Rautava et al., 1993) and one used PTSD symptoms (Davies et al., 2008). In their prospective study Rautava et al. (1993) examined associations between characteristics of families and infant colic. The authors assessed 12 aspects of the birth experience and

reported that with each additional aspect, the chance of infant colic increased cumulatively. Importantly aspects of the *fathers'* birth experience were also associated with infant colic. The authors relied on mothers' assessments of colic rather than nurses' assessments, claiming that these were analogous. However, they did not indicate how this was assessed, nor how familiar each nurse was with each infant in order to make an accurate assessment.

Davies et al. (2008) reported a relationship between mothers' birth-related post-traumatic stress symptoms at six weeks postpartum and their reports of their infants' temperament. The largest effect was shown on the subscale of Fussy/Difficult; mothers who met the criteria for diagnosis of PTSD rated their infants as significantly more Fussy-Difficult than mothers with no symptoms of PTSD ( $d = 1.25$ ). As with the attachment variables, correlations between symptom clusters of PTSD and infant temperament variables were examined, with all but three correlations (Unadaptable with re-experiencing and avoidance, and Unpredictable with re-experiencing) reaching significance.

### 3.5 Parenting Behaviour

Two studies examined parenting behaviours that did not promote or reflect parent-infant attachment (Mercer, 1985; Bryanton et al., 2009). Both studies used mothers' perceptions of the birth as the dependent variable, rather than symptoms of PTSD. Although Mercer et al. (1985) reported some significant positive correlations between mothers' perceptions of the birth experience and their maternal behaviours there were also a number of other significant differences between the teenage and older groups that constituted respondents. These difference may have influenced the correlations

between birth experience and maternal behaviours and included: teenagers attending fewer antenatal classes than older women (and more teenagers going to no antenatal classes); teenagers reporting a wish not to be pregnant more than older women did and feeling less proud than older women that they were pregnant; teenage group expressing more worries about their pregnancy than the older groups and reporting more concerns regarding planning and timing of their pregnancy compared to the older groups.

Bryanton et al. (2009) assessed parenting behaviours by asking mothers whether they exclusively breastfed (constructed as a positive behaviour) and whether they undertook four behaviours considered to be important in protecting the infant from harm: positioning the baby on its back to sleep; using a car seat; not smoking in the home; and using a smoke detector. Both variables were dichotomised requiring mothers to exclusively breastfeed and carry out all four safety behaviours in order to be scored as 'yes'.

#### 4. Discussion

This review identified eight studies that assessed the impact of maternal perceptions of the birth experience or maternal symptoms of postnatal PTSD on attachment, parenting and/or child temperament. Of the six studies that used attachment, or behaviours that promoted or relied on attachment, as the dependent variable, significant results for postnatal PTSD were found in two studies (Parfitt & Ayers, 2009; Davies et al., 2008) with a non-significant result found in one (Ayers et al., 2007) and significant results for birth experience were found in two studies (Durik et al., 2000; Peterson & Mehl, 1978) with null results also found in two studies (Ayers et al., 2007; Bryanton et al., 2009).

Two studies used measures of child temperament as their dependent variable with both finding some significant results (Rautava et al., 1993; Davies et al., 2008). One study used birth experience as the independent variable (Rautava et al., 1993) whereas the other used symptoms of PTSD (Davies et al., 2008).

Two studies examined the impact of mothers' perceptions of the birth experience on parenting behaviours (Mercer, 1985; Bryanton et al., 2009), with equivocal results. Mercer (1985) reported significant associations between mothers' appraisals of the birth and their later mothering behaviours at four points in the first postnatal year in a teenage cohort. These associations were also found at three of the four time points in a group of mothers in their 20's but were not found in at any point a cohort aged 30-42 years. In contrast, Bryanton et al. (2009) reported that birth experience did not predict parenting behaviours.

By contrast to case reports (e.g. Ballard, Stanley & Brockington; 1995) and qualitative research (e.g. Ayers, Eagle & Waring; 2006), this review suggests a less definitive role for birth experiences and postnatal PTSD in determining mother-infant attachment. While a number of factors may partially explain this difference, evaluation of the evidence in this review should also be tempered by methodological frailties. Validity of the null finding of Ayers et al. (2007) may be compromised because their attachment measure appeared to be a proxy measure embracing both children's temperament and parenting behaviour. Additionally, this measure is an adapted version of an observational measure and had not been assessed for concurrent validity. Bryanton and colleagues' (2009) null result, as they themselves noted, may indicate that social support factors can

mitigate the effects of a negative birth experience on attachment, given that partner and family support were both predictive of attachment.

Evaluation of those studies reporting significant results needs to consider the role of concurrent maternal mental health difficulties, particularly depression. Only two studies examined the effect of maternal depression on parent-infant bonding (Parfitt & Ayers, 2009; Davies et al., 2008), with both implying a role for comorbid depression in determining attachment. In conjunction with the well-established impact of depression on mother-infant relations (see section 1.2), these results appear to suggest that the impact of co-morbid depression on the mother-infant bond is as significant as, if not more so than, postnatal PTSD. However, both studies used the EPDS to measure depression, previously shown to detect anxiety as well as depression, but not to distinguish the two (Rowe, Fisher & Loh; 2008). As such, controlling for depression may actually control for anxiety, which is generally considered to be a central feature of PTSD. Without further studies that use a ‘purer’ measure of depression it is not possible to define what effects are due to depression and what are due to postnatal PTSD.

Additionally, the parameters of the measured outcomes need to be more carefully defined. As described, studies measuring either maternal or infant variables considered to be indicative of ‘attachment’ were categorised as ‘mother-infant attachment’. However, some researchers have drawn a distinction between ‘parent-baby bond’, which reflects how the parent feels about the baby, and ‘attachment’, which reflects how the infant feels about the parent. The four studies reporting a positive result looked at parent-baby bond, whereas Bryanton et al. (2009) analysed effects on a score composed of both parent-baby bond *and* attachment and found no significant results.



The way in which ‘birth experience’ was operationalised may also be salient given the apparently limited overlap in this multi-factorial construct’s use across the six studies deploying it. The birth experience factors assessed by Bryanton et al. (2009) may indeed not affect attachment but had they used an alternative measure based on different factors perhaps this would have produced a significant result (as with Peterson and Mehl, 1978).

Given these methodological limitations, firm conclusions establishing an effect of birth experience and/or postnatal PTSD on bonding and attachment are difficult to draw. Circumscribed evidence suggests that the birth experience and postnatal PTSD can affect the parent-baby bond but contribution to the variance in the bond is likely to be small and mediated or explained by a number of other factors. No study used a measure that solely examined attachment, thereby precluding judgement of the impact of birth experience/postnatal PTSD upon it.

The two studies reviewed here that examined parenting behaviours reported contrasting results, although, on the basis of information in the reports, it seems that the measure of birth experience used by Bryanton et al. (2009) was very similar to, if not the same as, the measure used by Mercer (1985). Mercer’s (1985) study highlighted several factors that could mediate, or even account for, an apparent relationship between birth experiences and mothering behaviours. Firstly they reported a significant correlation for teenage mothers not evident in the older cohort, suggesting that maternal age could mediate the impact of birth experience. However, other differences between the age-determined cohorts may also account for these differences; as the teenage group attended fewer antenatal classes they may have been less prepared for the birth, may have

experienced it as more aversive, and been less prepared for parenting, consequently scoring lower on assessment of mothering behaviours. Attendance at antenatal classes could therefore explain the apparent correlation between an aversive birth experience and poorer mothering. On the basis of the above issues then, and the fact that only two studies reported on parenting behaviours, there is currently an absence of evidence on which to base conclusions about the impact of birth experience on parenting behaviours.

The mechanisms by which PTSD/birth experiences might affect bonding were not considered by any of the reviewed studies. Research with mothers presenting with PTSD as a result of domestic violence has suggested that mothers' abilities to feel and express their emotions may affect bonding (Samuelson & Cashman; 2008). Alternatively, some have reported links between increased arousal symptoms in PTSD and comorbid depression, but not between depression and either avoidance or re-experiencing symptoms. For example, in mothers exposed to the World Trade Center attacks, arousal symptoms significantly correlated with depression not only when the other two symptom clusters were controlled for but also when 'disturbed sleep' and 'difficulty concentrating' (symptoms that overlap between PTSD and depression) were controlled for (Rubacka et al.; 2008). Given the well-established effects of depression on bonding it may be that the increased arousal facet of PTSD affects the parent-baby bond via the impact of comorbid depression. Alternatively, as significant correlations exist between all the symptom clusters and mother-infant bonding (Davies et al.; 2008) it is possible that each cluster affects bonding via a different underlying mechanism.

Similarly, birth experience is also a multi-factorial construct, some aspects of which may be more salient for the mother-infant bond than others. The only study

reviewed here to analyse the impact of different dimensions of birth experiences (as opposed to a total ‘birth experience’ score) reported no significant correlations with the parent-baby bond (Ayers et al.; 2007). However, this study did not appear to assess the impact of pain during labour on bonding, which appears significantly associated with severely or extremely disordered mother-infant bonding (Kumar; 1997). Further investigation of the impact of pain experiences during labour on bonding is therefore warranted.

In the two studies examining child temperament as the dependent variable (Davies et al., 2008; Rautava et al., 1993) a particular issue may be their use of maternal report to measure the outcome. Given the comorbidity and shared symptoms between PND and postnatal PTSD, the potential effects of the ‘depression-distortion effect’ (Richters & Pelligrini; 1989) on mothers’ ratings of their infants’ temperament cannot be overlooked. As such the results reported in these two studies may overemphasise the potential for birth experience to impact on child temperament. As such it is not possible to draw firm conclusions regarding whether birth experience/postnatal PTSD affects child temperament on the basis of two studies. A greater body of research is needed to clarify whether these effects exist and to understand their underpinning mechanisms.

Six of the studies reviewed here failed to control for the possible effects of other mental health disorders on outcome variables. The potential relevance of depression for these studies has already been noted but it may also be relevant to consider mothers’ trait anxiety levels. Higher trait anxiety has been cited as a risk factor for postnatal PTSD (Olde et al.; 2006) with maternal trait anxiety specifically identified as uniquely related to certain aspects of the mother-infant bond (Feldman, Weller, Leckman, Kuint &

Eidelman; 1999). Without appropriately designed research that examines the separate effects of PTSD and other mental health problems or traits it would be premature to conclude that the results found by these studies were due to PTSD or the birth experience and not to these alternative variables.

Many of the studies are limited by small sample sizes, themselves often representative of only a limited population. All studies were conducted in Europe, America or Canada so are likely to be based on models of parenting dominant in Western cultures. The majority of participants also appeared to be middle-class, well-educated and living with partners, thus further limiting generalisability and any conclusions drawn from this review can only be justifiably applied to these narrow populations.

This review combined findings of studies using PTSD symptoms and the birth experience as the independent variable, which may potentially be seen as a weakness that precluded firmer conclusions. However, up to a third of women may experience birth as traumatic (Ayers; 2004) and many of these may experience distress related to the presence of some symptoms of PTSD, even if they do not meet the criteria for a full diagnosis. As such it was considered clinically legitimate to include studies using both independent variables. As the body of research in this area increases, future reviews should look to separately analyse the impact of PTSD and birth experiences on infant outcomes as each will have unique implications for clinical practice.

The role of fathers' birth experiences and/or PTSD symptoms on infant outcomes have not been sufficiently scrutinised in this review. Although three studies did separately analyse data for fathers and mothers (Ayers et al., 2007; Parfitt & Ayers, 2009; Rautava et al. 1993), synthesis of their results offers no clear evidence for how father-

infant interactions, child temperament and/or fathers' parenting behaviours may be affected by their birth experiences.

#### 4.1 Clinical Implications

Conclusions at this stage are of necessity extremely tentative given the relative paucity of evidence. However there is sufficient evidence to suggest that professionals working with mothers and their infants should be alert to the possibility that mothers' birth experiences and/or symptoms of postnatal PTSD could adversely affect mother-infant bonding. Until further research provides a clearer picture of the impact of birth experiences and/or postnatal PTSD and the factors which mediate it, it would be clinically prudent for professionals to routinely ask women about their birth experience and symptoms of postnatal PTSD so as to be fully appraised of the potential risks to bonding.

Future research into the mechanisms by which bonding might be affected should also help identify interventions that could minimise these adverse effects. A small amount of literature exists regarding the prevention and treatment of traumatic birth experiences but none of these have investigated the effects on mother-infant bonding.

#### 4.2 Implications for Future Research

The paucity of studies, their relative lack of comparability, and poor control of extraneous variables prohibits firm conclusions. Future research should more clearly delineate the role of birth experiences/postnatal PTSD in determining infant outcomes and identify other variables that could mediate this. Future research also needs to focus on understanding *how* maternal birth experiences and PTSD symptoms affect infant outcomes. This is essential if professionals are to help women reduce the impact of an

aversive birth experience on their infant. Given that PTSD and birth experiences are both composite constructs exploration of the relative impact of their component parts is likely to be relevant to understanding these processes.

In order to better assess outcomes, researchers need to consider how to address reliability of parental report. Researchers interested in the parent-baby bond may legitimately assess mothers' own perceptions of their relationship with their infant, possibly supplementing this with observations of mother-infant interactions, whereas those purporting to assess attachment should rely primarily on observational methods. Extraction of information from these observations should use reliable and valid procedures, based on sound theoretical reasons for choosing those specific behaviours. Researchers interested in children's behaviour should consider carefully how best to collect this data; the guidelines developed by Richters (1992) for how to make these decisions, which were drawn up in relation to parental depression, may offer a useful framework to researchers in the area of postnatal trauma. On a related note, all the studies reviewed here that examined mother-infant bonding measured the 'level' of attachment, as opposed to 'style' of attachment, which has been criticised as a simplistic approach as it is not grounded in the theoretical constructs of attachment (Laxton-Kane & Slade; 2002).

Women's rating of their birth experience have been shown to vary over time (Waldenström; 2003). Longitudinal research would allow researchers to map changes in women's perceptions of their birth and the impact on outcome variables, and to clarify if time itself mediates the impact of the birth experience/PTSD.

Prospective research starting in early pregnancy would permit control of potential effects of personality traits that may predispose people to develop PTSD, particularly trait anxiety and anger (Meffert et al.; 2008). As one of the major determinants of mother-infant bonding, maternal attachment style should also be controlled (van IJzendoorn; 1995) and should be assessed during the antenatal period to ensure infant-parent relationships do not influence parental attachment representations (ibid.). Prospective designs would also allow control of variables during pregnancy such as prenatal attitude to pregnancy (Peterson & Mehl; 1978) and social isolation (Rautava et al.; 1993) which have been implicated in determining parent-infant bonding and child temperament respectively.

Fourthly, as already discussed, researchers need to assess and control for the presence of other mental health difficulties in the mother at the time when outcomes are being assessed.

#### 4.3 Conclusions

This area of research is in its infancy and the limited existing evidence is methodologically vulnerable. However, the studies reviewed here indicate that mothers who experience birth as aversive, or those who develop postnatal PTSD, may report a less optimal parent-infant bond and/or difficulties with infant temperament. However, possible mechanisms by which bonding and temperament are affected have not been articulated and tested. Currently there is an absence of evidence for an effect of the birth experience/PTSD on parenting behaviours unrelated to bonding and attachment and to link fathers' birth experiences/PTSD symptoms to infant outcomes.

These tentative conclusions suggest that professionals working with families in the postpartum period should be sensitive to the possible impact of an aversive birth experience not only on the mother but also on her relationship with the infant and the infant's temperament.

Further research is needed in order to more clearly delineate the extent to which birth experiences/postnatal PTSD may impact on bonding and other infant outcomes and to understand the nature and extent of mediating factors. It is recommended that research utilise prospective designs, and that outcome measures are operationalised based on theoretically sound models of mother-infant relationships and interactions.



## 5. References

Achenbach, T.M. (1991). *Manual for the child behaviour checklist 4-18 and 1991 profile*.

Burlington, VT: University of Vermont Department of Psychiatry.

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders*. 4<sup>th</sup> Ed. Washington, DC: Author.

Ayers, S. (2004). Delivery as a traumatic event: Prevalence, risk factors, and treatment for postnatal posttraumatic stress disorder. *Clinical Obstetrics and Gynecology*, 47(3), 552-567.

Ayers, S., Eagle, A. & Waring, H. (2006). The effects of childbirth-related post-traumatic stress disorder on women and their relationships: A qualitative study. *Psychology, Health and Medicine*, 11(4), 389-398.

\*Ayers, S., Wright, D.B. & Wells, N. (2007). Symptoms of post-traumatic stress disorder in couples after birth: association with the couple's relationship and parent-baby bond. *Journal of Reproductive and Infant Psychology*, 25(1), 40-50.

Ballard, C.G., Stanley, A.K. & Brockington, I.F. (1995). Post-traumatic stress disorder (PTSD) after childbirth. *British Journal of Psychiatry*, 166, 525-528.

Barnard, K. (1994). *NCAST Feeding Scale*. Seattle, WA: NCAST-AVENUW Publications, University of Washington, School of Nursing.

Bates, J.E., Freeland, C.A. & Lounsbury, M.I. (1979). Measurement of infant difficultness. *Child Development*, 50, 794-803.

Beck, C.T. (1998). The effects of postpartum depression on child development: A meta-analysis. *Archives of Psychiatric Nursing*, 12(1), 12-20.

Biringen, Z., Robinson, J.L. & Emde, R. (2000) Appendix A: The Emotional Availability Scales (2<sup>nd</sup> Ed Abridged Infancy/Early Childhood Version). *Attachment and Human Development*, 2(2), 51-55.

Blank, M. (1964) Some maternal influences on infants rates of sensorimotor development. *Journal of the American Academy of Child and Adolescent Psychiatry*, 3, 668-687.

\*Bryanton, J., Gagnon, A.J., Hatem, M. & Johnston, C. (2009). Does perception of the birth experience predict women's early parenting behaviours? *Research in Nursing and Health*, 32, 191-203.

Clark, R. (1985). *The Parent-Child Early Relational Assessment*. Madison, WI: University of Wisconsin Medical School, Department of Psychiatry.

Crittenden, P. (1988). Relationships at risk. In Belsky, J. & Nezworski, T. (Eds) *Clinical implications of attachment*. (p136-174). London, UK: Lawrence Erlbaum Associates.

Condon, J.T. & Corkindale, C.J. (1998). The assessment of parent-to-infant attachment: Development of a self-report questionnaire instrument. *Journal of Reproductive and Infant Psychology*, 16, 57-76.

\*Davies, J., Slade, P., Wright, I. & Stewart P. (2008). Posttraumatic stress symptoms following childbirth and mothers' perceptions of their infants. *Infant Mental Health Journal*, 29(6), 537-554.

Dekel, R. & Goldblatt, H. (2008). Is there intergenerational transmission of trauma? The case of combat veterans' children. *American Journal of Orthopsychiatry*, 78(3), 281-289.

\*Durik, A.M., Shibley Hyde, J. & Clark, R. (2000). Sequelae of cesarean and vaginal deliveries: psychosocial outcomes for mothers and infants. *Developmental Psychology*, 36(2), 251-260.

Feldman, R., Weller, A., Leckman, J.F., Kuint, J. & Eidelman, A.I. (1999). The nature of the mother's tie to her infant: Maternal bonding under conditions of proximity, separation and potential loss. *Journal of Child Psychology and Psychiatry*, 40(6), 929-939.

Fones, C. (1996) Posttraumatic stress disorder occurring after painful childbirth. *Journal of Nervous and Mental Disease*, 184(3), 195-196.

Goldbeck-Wood, S. (1996). PTSD may follow childbirth. *British Medical Journal*, 313, 774.

Gottvall, K. & Waldenström, U. (2002). Does a traumatic birth experience have an impact on future reproduction? *British Journal of Obstetrics and Gynaecology*, 109, 254-260.

Grace, S.L., Evindar, A. & Stewart, D.E. (2003). The effect of postpartum depression on child cognitive development and behaviour: A review and critical analysis of the literature. *Archives of Women's Mental Health*, 6, 263-274.

Hofberg, K. & Brockington, I. (2000). Tokophobia: An unreasoning dread of childbirth. *British Journal of Psychiatry*, 176, 83-85

Kumar, C. (1997). "Anybody's child": Severe disorders of mother-to-infant bonding. *The British Journal of Psychiatry*, 171(8), 175-181.

Laxton-Kane, M. & Slade, P. (2002). The role of maternal prenatal attachment in a woman's experience of pregnancy and implications for the process of care. *Journal of Reproductive and Infant Psychology*, 20(4), 253-266.

Meffert, S.M., Metzler, T.J., Henne-Haase, C., McCaslin, S., Inslicht, S., Chemtob, C., Neylan, T. & Marmar, C.R. (2008). A prospective study of trait anger and PTSD symptoms in police. *Journal of Traumatic Stress*, 21(4), 410-416

\*Mercer, R.T. (1985). Relationship of the birth experience to later mothering behaviors. *Journal of Nurse-Midwifery*, 30(4), 204-211.

Meyer, E.C., Zeanah, C.H., Boukydis, C.F. & Lester, B.M. (1993). A clinical interview for parents of high-risk infants: concept and applications. *Infant Mental Health Journal*, 14(3), 192-207.

Murray, L., Cooper, P. & Hipwell, A. (2003). Mental health of parents caring for infants. *Archives of Women's Mental Health*, 6(S2), s71-s77.

Oates, J.M. & Gervai, J. (2003). Mothers' Object Relations Scales. Poster presented at the XI European Conference on Developmental Psychology, Milan, Italy.

Office of National Statistics (2008) [www.statistics.gov.uk](http://www.statistics.gov.uk). Accessed 15<sup>th</sup> January 2010

Olde, E., van der Hart, O., Kleber, R. & van Son, M. (2006). Posttraumatic stress following childbirth: A review. *Clinical Psychology Review*, 26, 1-16.

\*Parfitt, Y.M. & Ayers, S. (2009). The effect of post-natal symptoms of post-traumatic stress and depression on the couple's relationship and parent-baby bond. *Journal of Reproductive and Infant Psychology*, 27(2), 127-142.

\*Peterson, G.H. & Mehl, L.E. (1978). Some determinants of maternal attachment. *American Journal of Psychiatry*, 135(10), 1168-1173.

Poobalan, A.S., Aucott, L.S., Ross, L., Smith, W.C.S., Helms, P.J. & Williams, J.H.G. (2007). Effects of treating postnatal depression on mother-infant interaction and child development. *British Journal of Psychiatry*, 191, 378-386.

Quinell F.A. & Hynan, M.T. (1999). Convergent and discriminant validity of the Perinatal PTSD Questionnaire (PPQ): a preliminary study. *Journal of Traumatic Stress*, 12, 193-100.

\*Rautava, P., Helenius, H. & Lehtonen, L. (1993). Psychosocial predisposing factors for infantile colic. *British Medical Journal*, 307, 600-604.

Richters, J. (1992). Depressed mothers as informants about their children: A critical review of the evidence for distortion. *Psychological Bulletin*, 112(3), 485-499.

Richters, J. & Pelligrini, D. (1989). Depressed mothers' judgement about their children: An examination of depression-distortion hypothesis. *Child Development*, 50, 1068-1075.

Rowe, H.J., Fisher, J.R.W. & Loh, W.M. (2008). The Edinburgh Postnatal Depression Scale detects but does not distinguish anxiety disorders from depression in mothers of infants. *Archive of Women's' Mental Health*, 11, 103-108.

Rubacka, J. M., Schmeidler, J., Nomura, Y., Luthra, R., Rajendran, K., Abramovitz, R. & Chemtob, C.M. (2008). The relationship between PTSD arousal symptoms and depression among mothers exposed to the World Trade Center attacks. *Journal of Nervous and Mental Disease*, 196(6), 504-507

Ryding, E.L. (1993) Investigation of 33 women who demanded a caesarean section for personal reasons. *Acta Obstetrica et Gynaecologica Scandinavica*, 72, 280-285.

Samuelson, K.W. & Cashman, C. (2008). Effects of Intimate Partner Violence and Maternal Posttraumatic Stress Symptoms on Children's Emotional and Behavioural Functioning, *Journal of Emotional Abuse*, 8(1), 139-153.

Van IJzendoorn, M.H. (1995). Adult attachment representations, parental responsiveness and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin*, 117(3), 387-403.

Waldenström, U. (2003) Women's memory of childbirth at two months and one year after birth. *Birth*, 30, 248-254.

Watson, C.G., Juba, M.P., Manifold, V., Kucala, T. & Anderson, P.E.D. (1991). The PTSD interview: Rationale, description, reliability and concurrent validity on a DSM-II based technique. *Journal of Clinical Psychology*, 47, 205-214.

White, T., Matthey, S., Boyd, K. & Barnett, B. (2006). Postnatal depression and post-traumatic stress after childbirth: Prevalence, course and co-occurrence. *Journal of Reproductive and Infant Psychology*, 24(2), 107-120.



## **Part Two: Research Report**

Knowledge, Beliefs and Attitudes of Health Visitors  
In Relation to Postnatal Post-traumatic Stress Disorder:  
A Qualitative Investigation

## Abstract

*Title:* Knowledge, Attitudes and Beliefs of Health Visitors in Relation to Postnatal Post-Traumatic Stress Disorder: A qualitative investigation

*Author:* Joanna Darby, Trainee Clinical Psychologist

*Background:* Research has demonstrated that, for some women, events during childbirth can lead to post-traumatic stress disorder (PTSD). Despite the implications for the care of women with birth-related trauma, there is currently no research on this disorder from the perspective of professionals working with women in the postpartum. This study therefore aimed to explore the understandings, attitudes and beliefs of health visitors regarding postnatal PTSD.

*Method:* Data was collected through three focus groups with 11 health visitors and three interviews with managers of health visiting teams. Verbatim transcripts were analysed using template analysis.

*Results:* From the template, a model representing health visitors' understanding of birth-related trauma was constructed. This highlighted two pathways by which participants perceived birth to result in distress. In the first route, qualitative features of the birth were invoked as making it objectively recognisable as traumatic. Participants perceived that this led directly to distress for almost all mothers. Alternatively, women could experience an objectively 'normal' birth but for some, ante- peri- and/or post-natal circumstances caused them to experience it as traumatic.

*Discussion:* Although much of the phenomenology described by participants was commensurate with that identified in the literature, there was a notable discomfort amongst participants in using the term 'PTSD'. Possible reasons for this are explored.

There was also an absence of the recognition of meaning of events in health visitors' understandings of trauma, suggesting they may lack a full theoretical understanding of the concept. It is suggested that action be taken to support health visitors in the recognition of birth-related trauma and that care pathways are more clearly explicated. Given the exploratory nature of this research, suggestions are made for further research.

**Key words:** health visitors, childbirth, post-traumatic stress, attitudes

**Target journal:** Birth: Issues in Perinatal Care

## 1. Introduction

### 1.1 Postnatal Post-traumatic Stress Disorder

Since the late 1970s, research has increasingly challenged ideas of childbirth as a benign experience. Initial case studies reported examples of women experiencing symptoms commonly associated with post-traumatic stress disorder (PTSD), such as flashbacks and avoidance, directly attributable to birth (e.g. Moleman, van der Hart & van der Kolk; 1992). Subsequent research into prevalence has suggested that approximately one third of women experience childbirth as ‘traumatic’ and that at six weeks postpartum between 2.8-5.6% of women report birth-related post-traumatic stress (PTS) symptoms (Olde, van der Hart, Kleber & van Son; 2006). At around six months postpartum, approximately 1.5% of women report still experiencing symptoms of PTSD (Olde et al; 2006). At this point a note regarding terminology is relevant; the criteria for a diagnosis of PTSD are clear (Appendix B), with women required to experience a certain number of symptoms from each of three ‘symptom clusters’. However, a commonly raised issue in research is that women may report *some* symptoms of PTSD but not enough to warrant a full diagnosis, although those few symptoms may still cause significant distress or impairment of functioning. In these circumstances the term post-traumatic stress (PTS) symptoms is usually used.

Although the current evidence base is circumscribed, a review of the literature highlighted that if mothers appraise their childbirth experiences as aversive or traumatic, or if they develop birth-related PTS symptoms, they may also report less optimal parent-infant bonding and/or difficulties with infant temperament (Darby, Robertson & Herdman; in press). Case studies have delineated more detailed examples of the potential

impact of aversive birth experiences, including mothers avoiding contact with their baby, resentment towards the newborn, lack of emotional interaction with the infant and problems in the mother/infant relationship (Ballard, Stanley & Brockington, 1995; Moleman et al., 1992). Women may also report aggression towards partners and loss of libido (Ballard et al., 1995) as well as partners' irritation with them for their prolonged distress (Allen, 1998). Finally, traumatic birth experiences have led some women to avoid further pregnancy, even though they had previously planned more children, or to have subsequent children delivered by caesarean section (Allen, 1998).

The numerous risk factors implicated in the development of birth-related PTS symptoms have been organised into a conceptual framework consisting of a two-dimensional matrix (Slade; 2006). One arm organises predictors by the relative time at which the factor arises (pre-birth, perinatal or post-birth), the other organises predictors according to whether they are internal to the mother, external to her, or an interaction of the two. The framework highlights the importance of perceptions of the event, particularly in relation to perinatal factors such as: high levels of fear for self and/or the baby (Czarnocka & Slade; 2000); perception of a lack of control or powerlessness (Czarnocka & Slade, 2000; Soet, Brack & Dilorio, 2003); perceptions of a lack of support from partners (Czarnocka & Slade; 2000) and/or staff (Wijma, Soderquist & Wijma, 1997; Czarnocka & Slade, 2000). The framework also emphasises that evaluation of the impact of the post-birth environment has been neglected (Slade; 2006).

## 1.2 Models of PTSD and Postnatal PTSD

Various theories have evolved to explain the development, symptoms and maintenance of PTSD arising from traumatic events. Most models emphasise fear as the

principal emotion related to PTSD, although helplessness, horror, anger and shame are also often implicated. '[U]nusual and inconsistent memory phenomena centred in the event' (p345; Brewin & Holmes; 2003) are proposed as distinguishing features of PTSD, whereby people tend to unintentionally recall certain aspects of the trauma in great detail during 'flashbacks', but can only intentionally recount vague aspects of it.

Consonant with theoretical models, diagnostic criteria have moved from requiring the traumatic event to be 'outside the normal range of experience' (representing a focus on the objective nature of an event; e.g. APA; 1980) to focusing on the individual's subjective experiences and perceptions (APA; 1994). Indeed, the individual's perception of threat during the event appears a more significant predictor of distress than factors which make the event appear objectively more or less traumatic (Brewin & Holmes; 2003). It is generally accepted that exposure to a traumatic event is a necessary, but not sufficient, requirement for a person to develop the PTSD symptom pattern.

Although research has noted similarities in the presentation and risk factors for PTSD following childbirth and following other events, thus far there has been a notable absence of attempts to ground understanding of birth-related PTSD in a theoretical framework. However, researchers have recently attempted to empirically test the application of the cognitive model (Ehlers and Clark; 2000) to this disorder (Ford, Ayers & Bradley; 2010). The cognitive model proposes that individuals experiencing persistent symptoms of PTSD perceive a current threat to themselves as a result of (a) their negative appraisals of the trauma and/or its sequelae and (b) the nature of memory for the event and its links to autobiographical memories.

In testing the applicability of the cognitive model to birth-related PTS symptoms, Ford et al. (2010) reported that at three weeks postpartum a model that included measures of prior beliefs, coping styles and post-traumatic cognitions explained 23% of the variance in mothers' symptoms. At three months postpartum the model only predicted 9% of the variance, but when social support was added as a variable partially mediated by post-traumatic cognitions, the model explained 16% of the variance. They suggested this may indicate that the cognitive model can explain women's acute stress reactions to a traumatic birth experience but that other predictors such as social support are better able to explain the longer term maintenance of birth-related PTS symptoms. Insufficient post-trauma social support has been cited as having the strongest effect size of 14 risk factors for PTSD (Brewin, Andrews & Valentine; 2000). Other studies have suggested that negative reactions of others in the support environment might be more important in determining PTSD symptom severity than a lack of positive social support (e.g. Ullman, Filipas, Townsend & Starzynski; 2007), particularly for women (Andrews, Brewin & Rose; 2003).

### 1.3 Identification of PTSD

The potential consequences of birth-related PTS symptoms highlight the importance of providing appropriate interventions and support for women who may be suffering from postnatal PTSD. Although there is a paucity of evidence regarding effective interventions for postnatal PTSD, NICE guidelines for the management of PTSD in adults (NICE; 2005) recommend trauma-focused cognitive behaviour therapy (CBT) or eye movement desensitisation and reprogramming, both of which should be delivered by appropriately trained professionals. These interventions are specific to



PTSD and contrast with the self-help strategies, non-directive counselling or brief CBT or interpersonal therapy recommended for women diagnosed with mild to moderate depression in the postpartum period (NICE; 2007). As such, if a woman's difficulties are not recognised or are inappropriately constructed as other disorders (e.g. postnatal depression; PND), then delivery of an appropriate, tailored treatment is likely to be compromised. It is therefore essential for health professionals to accurately recognise postnatal PTSD and distinguish it from other postnatal mood disorders in order to ensure women have access to the most effective treatments delivered by appropriate services.

Despite the estimated high prevalence of PTSD following any traumatic event, research has noted that the recognition of PTSD in primary care settings, where such women are most likely to initially present, may be sub-optimal (e.g. Liebschutz et al.; 2007). Various factors may further complicate the identification of birth-related PTS symptoms. Firstly, hyper-arousal, a key component of PTSD, is often construed as 'normal' or even adaptive in the postnatal period as it may promote protection of the infant (Slade; 2006) and poor sleep is certainly expected. The use of hyper-arousal as indicative of postnatal psychopathology is thus problematic. Secondly, it has been suggested that people experiencing PTSD may report other psychological difficulties such as depression or anxiety, not PTSD (Liebchutz et al.; 2007). Given that guidelines in relation to postnatal mental health appear to place a heavy emphasis on PND, this may lead practitioners to focus on symptoms which support this label, and disregard other symptoms and alternative diagnoses. This may be further complicated by the significant co-morbidity between PTS symptoms and PND (White, Matthey, Boyd & Barnett; 2006). Thirdly, subjective perceptions and appraisals of the birth play a major role in women's

birth experiences and possible development of PTS symptoms. As observable factors during labour and birth are not always relevant, identifying women at risk of developing postnatal PTSD may be difficult (Ford et al.; 2010). Finally, previous criteria for PTSD (prior to DSM-IV; APA, 1994) required that the traumatic event be ‘outside the range of usual human experience’, thereby eliminating the possibility of developing PTSD in response to childbirth. Although this criterion has now changed, Lyons (1998), citing Moleman et al. (1992), noted that there remained ‘a reluctance by health professionals to acknowledge that PTSD could occur following childbirth’ (p.92). It is unclear whether this reluctance still remains and whether this affects the care provided to women with postnatal PTSD. Together such factors suggest that detection of postnatal PTSD may be inadvertently compromised and concern may be further justified given the poor recognition of PTSD in other populations and settings.

British postnatal services are directed by a number of national level guidelines, including the National Service Framework for Children, Young People and Maternity Services (Department of Health, 2004) and the Healthy Child Programme (HCP; DoH, 2009). Recent reviews of these services placed an emphasis on postnatal health care being delivered by multi-disciplinary teams, led and co-ordinated by health visitors (HVs; Facing the Future; DoH, 2007). Also emphasised is the importance of health professionals’ support for parents to provide warm, positive and sensitive parenting in the context of good, stable couple relationships, thus promoting the early formation of a strong parent-child attachment. Given the potential impact of postnatal PTSD for the mother, infant and family the task of promoting positive parenting and good attachments should include recognition and support of women with birth-related PTS symptoms. The

specified role of HVs in overseeing and hands-on delivery of the HCP suggests that the recognition and support of women with postnatal PTSD should therefore fall under the remit of HVs, even if the task of providing interventions for the disorder does not.

Despite indications that there may be difficulties in the recognition of postnatal PTSD, a literature search identified no existing data on any health professionals' understanding of, or attitudes and beliefs about, postnatal PTSD. Given the key role of HVs in early provision of care to mothers in the postnatal period, a greater understanding of their perceptions of postnatal PTSD and an understanding of how and what services they provide to women with birth-related PTS symptoms seems warranted. Although professions such as clinical psychology may provide specialist input to mothers traumatised by birth, ensuring women who need the service are referred by primary care workers is an important first step in service provision. This may include provision of training to HVs if it is identified that they currently lack the necessary knowledge and skills to identify and refer women appropriately. Additionally the role of clinical psychology increasingly includes the dissemination of psychological knowledge to support understanding and care of clients' psychological well-being at all levels of service provision. Examination of HVs' understanding of birth-related PTS symptoms may enable enhanced care of women experiencing these symptoms by promoting a greater psychological understanding of their difficulties by HVs.

#### 1.4 Research Questions

What do HVs understand and know about birth-related PTS symptoms? What are the attitudes and beliefs of HVs regarding these symptoms?

What are the training needs of HVs in relation to birth-related PTS symptoms?

## 1.5 Objectives

- To understand the current knowledge, attitudes and beliefs towards postnatal PTSD amongst teams of HVs.
- To broaden the existing literature on postnatal PTSD by exploring the perspectives of health professionals about the disorder.
- To inform the design of training programmes for HVs on postnatal PTSD, including potential content, structure, how the training is presented and who should deliver it.

## 2. Method

### 2.1 Design

Due to the dearth of literature regarding the care provided to women who experience birth-related trauma and about the knowledge, beliefs and attitudes on which health professionals might base their approaches to such care, the current study utilised an exploratory qualitative design.

Qualitative research can access richer understandings of participants' experiences and perceptions within their particular context than quantitative research (Murphy, Dingwall & Greatbatch, 1998, as cited in Freeman; 2006), often utilising inductive approaches (contrasted with deductive approaches commonly used in quantitative research) to contribute new information to theories or inform new hypotheses (Casebeer & Verhoef; 1997). Thus, qualitative approaches are appropriate when there is little existing knowledge, as with the current research.

### 2.2 Rationale for Multi-method Approach

Researchers may utilise different qualitative approaches within the same study for reasons of: pragmatism; allowing different perspectives to be compared and contrasted; confirmation of data and attainment of data completeness (Lambert & Loiselle; 2008). In this study the reason was largely pragmatic; the decision to collect data from health visitors using focus groups was made first, for the reasons outlined below. A number of issues meant that focus groups would not be feasible for collecting data from managers and individual interviews were selected instead.

### 2.2.1. *Focus groups.*

Focus groups have been defined as ‘a research technique that collects data through group interaction on a topic determined by the researcher’ (p.130; Morgan; 1996), and offer a distinctive approach as data is derived from the *interactions* between participants. There is substantial precedent in the health sciences literature of using focus groups to investigate professionals’ knowledge, attitudes, perceptions and beliefs about a variety of clinical problems (e.g. Hazelton, Rossiter & Milner; 2006) and to understand how staff define their roles in relation to certain disorders (e.g. Miller & Jaye; 2007).

Focus groups were selected as the means of data collection, firstly, because they allowed examination of not only *what* participants’ attitudes and beliefs are but also *why* they hold them and under what circumstances they might vary (Kitzinger; 1995), in line with the researcher’s epistemological stance that attitudes are socially constructed (see Appendix F). Secondly, the researcher has less ‘control’ over the direction of focus groups, allowing participants to raise issues of importance to them more easily than could be achieved in one-to-one interviews (Morgan; 1996). However, this can potentially lead to difficulties if participants are drawn to topics that are not perceived by the researcher as relevant to the research question. Finally, it was thought that HVs may be relatively unfamiliar with the concept of trauma arising from birth experiences and that some participants may therefore have felt they had little to contribute; focus groups can support those people to make contributions in response to the expressed attitudes and experiences of other participants (Kitzinger; 1995). However, it was also recognised that the contributions people made were likely to be at least influenced, if not constrained, by the group situation; Sim (1998) refers to this as ‘the ‘censoring’ of dissenting views held by

less confident participants within the group' (p.348). Thus, if a participant felt her opinion or experience differed from the 'majority view' of the group, or from that of someone she perceived as more powerful or more experienced than herself, she may have felt uncomfortable expressing this alternative position. This could lead to a false impression of conformity between group members' views and attitudes and to the suppression of a wider range of views.

### *2.2.2 Individual interviews.*

Qualitative interviews, which have been widely used in health-related exploratory qualitative studies, involve the interviewer asking open-ended questions from an interview schedule, whilst allowing him/her to follow-up questions and comments in response to the interviewee's answers and remarks (Potter & Hepburn; 2005). This permits clarification of ambiguous points and exploration of topic areas which are not well understood and which the researcher may not previously have considered.

## **2.3 Participant Selection**

The study aimed to collect data on health professionals' views of postnatal trauma, identified as lacking in current literature. HVs were targeted for this study based on consensus that HVs constitute the 'first line' of healthcare provision in the postnatal period. This involves frequent and regular contact with mothers and families and responsibility for leading multi-disciplinary teams in line with the HCP. The role of HVs prioritises 'promoting infant, child and family mental health' and 'supporting the capacity for better parenting' (DoH; 2007). Thus, identification and support of women with postnatal PTSD appears to be an integral part of their role.

In order to participate HVs were required to

- be registered with the Nursing and Midwifery Council
- be employed by one of the four identified NHS trusts
- have a role in delivering the HCP.

11 HVs took part in three focus groups, which were stratified by the employing NHS trust<sup>2</sup>.

People with a position of managerial responsibility for HVs were targeted for the individual interviews as they were assumed to be based within a context which exposed them to wider political, cultural and economic influences that might affect HVs and their working practices. It was hoped that this information would promote a more complete picture of the context in which data from the focus groups were based. Data from interviews and focus groups were considered equally valid and triangulation in the sense of convergence between the two data sources was *not* the goal. This was commensurate with the researcher's epistemological position. Interviews were conducted with three participants who held varying managerial roles in relation to HVs. Participants' details are summarised in Appendix G.

## 2.4 Ethics Approval

Ethical approval was obtained from the relevant local research ethics committee (Appendix H).

## 2.5 Data Collection Procedure

The data collection procedure is depicted in Appendix I and described below.

---

<sup>2</sup> There were insufficient numbers of volunteers from two trusts to convene a focus group; therefore participants were actually from only two trusts.



## 2.6 Recruitment

Focus group participants were recruited from four NHS trusts operating at the primary care level. Participant Information Sheets (Focus Groups) (PIS:FG) (Appendix J) were distributed to eligible HVs in each trust and follow-up letters were distributed at least four weeks later (Appendix J). The PIS:FG and follow-up letter used the term ‘postnatal mental health’ rather than ‘postnatal PTSD’ to avoid priming participants. HVs interested in taking part contacted the researcher to register their interest. Focus groups were convened when a minimum of four HVs from a trust had volunteered.

Interview participants were recruited from the same NHS trusts as the HVs. Participant Information Sheets (Interviews) (Appendix J) were distributed via email, with a brief explanation of the purpose of the interviews, to those people who had authorised the recruitment of HVs from their trust for this study. The information sheets requested the managers to contact the researcher if they were interested in participating.

## 2.7 Procedure – Focus Groups

At the focus group participants were informed the discussion would centre on postnatal PTSD, within the general context of postnatal mental health. Participants were given the chance to ask questions and their written consent to participate in an audio-recorded focus group was sought (Appendix J).

Prior to the first focus group, 10 numbers between one and 48 were randomly generated. As people completed their consent forms they were allocated a number based on the order in which forms were returned. Those participants whose number was one of the 10 generated were informed they had been selected to be contacted at a later stage by the researcher to ask them to provide feedback on the analysis and interpretation of the

focus groups. If the participant did not consent to this part of the process on their consent form then the next participant to consent to being contacted later was selected instead.

HVs who consented to participate then completed the 'Background Information Questionnaire', prior to the focus group starting. The groups lasted 80-90 minutes. Discussions were guided by the researcher using a semi-structured schedule (see Appendix K), although participants were encouraged to raise issues of importance to them and to respond to each other's comments (Morgan; 1996). While the aim was for discussion to be free-flowing, the researcher ensured it stayed focused on relevant topics and that all participants were involved. Audio-recordings were made of the groups' discussions and notes on group interactions and non-verbal behaviours were made by a note-taker.

At the end of each group all participants were given Postnatal PTSD Information Sheets and invited to leave anonymous written feedback regarding their experience of the focus group to improve facilitation of future groups.

## 2.8 Procedure - Interviews

Qualitative interviews were conducted with three participants who held managerial responsibility for HVs. Once consent to participate had been obtained (Appendix J) participants completed the Background Information Questionnaire. Discussions were again guided by a semi-structured schedule but the researcher maintained a flexible approach and participants were encouraged to raise issues they felt were pertinent to the study. Interviews were audio-recorded and lasted 50-65 minutes. Participants were given a copy of the Postnatal PTSD Information Sheet Immediately following the interview the researcher recorded reflective impressions of it.

## 2.9 Analysis

### *2.9.1 Rationale for use of template analysis.*

Template analysis has been defined as ‘a varied but related group of techniques for thematically organising and analysing textual data’ (p.256; King; 2004). This organisation tends to be hierarchical, with groups of lower order codes (representing specific themes in the text) clustered into higher order codes (representing more general themes). Template analysis has been used to analyse data from individual interviews (e.g. King, Carroll, Newton & Doman.; 2002) and focus groups (e.g. Lucock, Mirza & Sharma; 2007) and to analyse interactions between members of a group (Offord, Hardy, Lamers & Bergin; 2006). Template analysis can be used from a variety of epistemological positions, including contextual constructionist (King; 2004). Application of template analysis in this study followed the approach described by King (2004).

### *2.9.2 Transcription.*

Transcription was guided by a number of *a priori* decisions (Appendix L). Focus groups and interviews were transcribed verbatim by the researcher using a ‘denaturalized’ approach (Oliver, Serovich & Mason; 2005). To preserve confidentiality, participants were assigned pseudonyms and identifying material was removed. (See Appendix L for transcript conventions).

### *2.9.3 Levels of analysis.*

The contextual constructionist approach is concerned with ‘relationships between accounts and the situations in which they were produced’ (Madill et al; 2000) therefore group interactions were subjected to analysis as well as participants’ vocalisations. As described by Duggleby (2005), group interactions were analysed separately to group data

but used the same technique and the resulting templates were then compared. Analysis of group interaction data was aided by the analytic template and interactive processes explicated by Lehoux, Poland and Daudelin (2006)

#### *2.9.4 A priori themes.*

As is common in template analysis, initial themes were identified *a priori* to guide initial coding. Three sets of *a priori* themes were identified; two were based on the topic schedules used in the data collection (i.e. one for focus groups and one for interviews) as recommended. The main topic areas functioned as higher order codes and questions from the schedule informed lower order codes. The third set of *a priori* themes related to group interactions and was based on previous literature regarding focus group interactions and the researcher's experience of conducting the focus groups.

#### *2.9.5 Initial templates.*

Initial coding was performed on each transcript. The researcher identified sections of text that related to the aims of the study and assigned a code, using coloured pens, to represent the segment. If an *a priori* theme seemed to represent a segment well, that code was assigned; if the segment seemed relevant but was not adequately represented by an *a priori* theme then a new code was developed. At the end of each transcript a list of the codes identified within it was produced. This process was conducted separately for each set of *a priori* themes such that three lists were produced; one for what was spoken in the focus groups, one for the focus group interactions and one for the individual interviews.

Each list was examined and the lists were compared to identify whether they functioned more effectively as three separate templates or whether two or more of them could be combined to produce a more encompassing template that described the data.

#### *2.9.6 Revising the templates.*

The resulting template(s) was then systematically applied to the relevant transcripts (see Appendix M for an example). During this process, deficiencies in the template(s) were identified (i.e. the template did not adequately describe something in the text) and changes were made in light of these (see Appendix N for examples of changes to the template).

#### *2.9.7 The 'final' template.*

The template(s) was considered to be 'complete' when it accounted for all segments of text deemed relevant to the research questions. The template was then used to aid the researcher in the interpretation of the data.

### 2.10 Quality Checks

Criteria for assessing the quality of qualitative research vary depending on numerous issues. This study employed the quality checks for template analysis proposed by King (from website), specifically 'independent scrutiny of the analysis', 'respondent feedback' and 'creation of an audit trail'. Accordingly, initial coding of a transcript was conducted separately by the researcher and another member of the research team and resulting codes were compared and discussed. The researcher then met with another member of the research team to discuss the initial template and justify analytical decisions taken during its construction. Alterations to the template were made in light of this discussion. A summary of the researcher's interpretation of the data was sent to participants for their comments. Finally a reflective journal was kept throughout the entire process of the research, from formation of the research questions to the write-up.

### 3. Results

The focus groups produced rich data regarding ideas participants verbalised and interactions between participants. The interviews added data as well as supplementing that collected in the focus groups. The final template is in Appendix O. A second template from analysis of the interactions is presented in Appendix P; due to space constraints it is not fully addressed here, although it is used to inform some of the interpretations. From the template analysis a model representing participants' understanding of birth-related trauma was developed (see Figure 1). This section addresses the research questions through an examination of the model and selected themes from the final template. Template analysis often produces more themes than can be reasonably/usefully addressed within the scope of one paper and users of template analysis are advised to focus on those that appear most salient (King; website). Themes selected were felt to have the most relevance to participants and the most immediate clinical implications, as well as being informed by the constraints of the doctorate for which this research was conducted. Verbatim extracts from the transcripts are presented to support understanding. The membership of each group/interview was as follows:

FG1: Louise, Sally, Becky,

Janice

Interview 1: Serena

FG2: Gemma, Lissa, Annabel

Interview 2: Melissa

FG3: Michelle, Amanda, Justine,

Eileen

Interview 3: Lucy

3.1 What do HVs understand and know about birth-related PTS symptoms? What are the attitudes and beliefs of HVs regarding these difficulties?

The above questions are best addressed through examination of the model. During analysis a number of themes emerged which encapsulated participants' understanding of birth-related trauma. The key point centres on the two 'routes' via which emotional distress can result from the birth experience, whereby HVs distinguished between the role of the qualitative nature of a birth as opposed to wider circumstances. This is explored in section 3.1.1. For births seen as objectively 'normal', HVs invoked a number of circumstances which could lead to birth-related distress. These are examined in section 3.1.2. Following on from those two routes, HVs appeared to struggle to label the distress that women might experience, although offered a number of effects that might be observable, as discussed in section 3.1.3. Finally, HVs offered ideas for managing the distress that could result from either type of birth, as described in section 3.1.4.

#### *3.1.1 Distinguishing types of birth.*

Although participants expressed reservations about the term 'PTSD' (discussed in 3.1.3), all participants accepted there were rare occasions when a birth could be so traumatic that it directly caused a mother to develop severe symptoms of distress.

Becky: The implication of that is that it's much more extreme isn't it?

...

Louise: And it's only a very small minority that experience birth to that extreme level isn't it?...that it's such a traumatic experience...that it actually frightens them ...

(7:143)

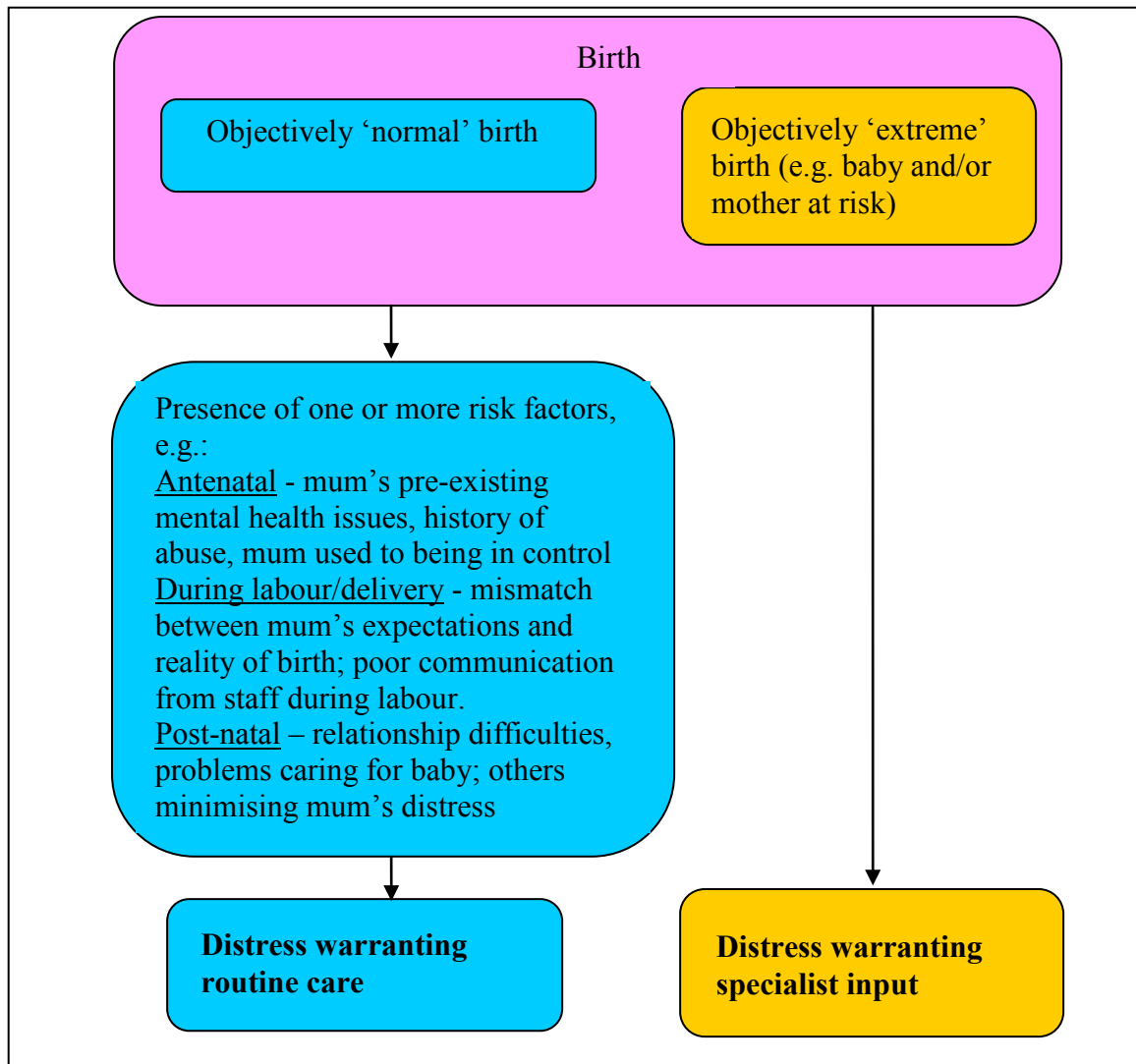


Figure 1. Model of participants understanding of traumatic birth experiences

However, participants seemed to distinguish between an extreme birth that could lead directly to ‘PTSD’, and a birth that seemed objectively ‘normal’ but that the mother experienced as traumatising because of other circumstances, such as a mismatch between her expectations and the reality of the birth.

Gemma: ...often it’s about expectations and perhaps...the reality of what’s actually happened...but you can hear two accounts of a delivery which...there are



huge similarities and that the way that women cope with those two situations can be entirely different...so you might presume that something...looks essentially not too bad...but actually that person's response to that experience ...is significantly more stressful...so it's...where's your start point really...and whether you are more predisposed or not...And then there are clearly the hideous deliveries where everything does...go very wrong...then therefore the proportion of people that will have a stress response to an experience like that will be much greater... (4:81)

Gemma thus drew a clear distinction between the 'hideous deliveries' where she expected mothers to 'have a stress response', and those deliveries that seem 'not too bad' but that mothers might perceive as traumatic depending on their predisposition. The former 'route' is depicted in gold on the right of Figure 1, and the latter is depicted on the left in blue.

Participants thus seemed to perceive a qualitative difference between 'normal' births and **traumatic deliveries**<sup>3</sup> (applied to instances when participants stated or implied that something qualitative about the birth itself led to significant distress in the mother). As such, aspects of the mother, the environment and so on were almost irrelevant and there was a sense that if mothers experienced a **traumatic delivery**, this would lead to psychological distress regardless of any other antenatal, perinatal or postnatal circumstances. This was endorsed by Melissa's feeling that predicting in advance who

---

<sup>3</sup> In the text, level one codes are identified by being placed in 'Quotation marks with the first letter in upper case'. Intermediate level codes are identified by being *italicised*. Lowest level codes are identified in **bold**. Codes from the interactions template are placed \*within asterisks\*.

will experience birth as traumatic is not possible because you cannot predict the qualitative aspects of a birth (64:1430).

Despite this, participants rarely explicated the necessary qualities of **traumatic deliveries**, relying instead on shared \*normative understandings of what constitutes ‘traumatic’ birth\*. However, there seemed to be an agreement that **risk** to the mother’s and/or infant’s life was relevant.

Louise: ...there are those really big, traumatic, horrible deliveries where the mum nearly dies and the baby nearly [dies and everybody recognises that as a

Sally: [Yeah, yeah

Louise: horrendous experience (50: 1216)

Louise’s phrase ‘everybody recognises that as a horrendous experience’ again made clear the idea that **traumatic deliveries** have qualities that can be seen by others to be traumatic. That these qualities were rarely defined, beyond the idea that **risk** might be involved, may have indicated a lack of understanding of PTSD on the part of participants, particularly regarding factors that are considered traumagenic within the literature on PTSD.

### *3.1.2 Circumstances.*

For mothers whose births did not meet the ‘criteria’ for **traumatic deliveries**, but who experienced the birth as traumatic, participants invoked a number of circumstances that could instigate this. In keeping with the principle **take a holistic approach** (*underlying principles of HV practice*; ‘Being a HV’), participants cited a wide range of circumstances that could create potential for trauma. In the template, these circumstances were divided temporally into *antenatal circumstances*, *perinatal circumstances* and

*postnatal circumstances*, and could also be seen to exist at different locations, including within the *mother*, aspects of the *birth*, aspects of the *environment* and *societal views of birth and motherhood*.

The code *antenatal circumstances* referred to factors cited by HVs that would be present prior to the birth, including during **this pregnancy**, and were generally seen as existing within the mother. For example, **strongly held expectations** referred to occasions when HVs expressed how mothers could have ideas about how the birth itself would proceed, how they would behave during this process and as a mother, and the baby's demeanour. This code exemplified the distinction between **traumatic deliveries** as a cause leading directly to distress, and circumstances with the potential to lead to distress, as HVs tended to only see **strongly held expectations** as problematic if there was a **mismatch between expectations and reality** of the *birth*.

Annabel: ... as far as the birth plans and things are concerned...because people fill out a birth plan and they think 'this is the way it's gonna go' and then when it doesn't they do feel as though they've failed... (7:152)

HVs also implicated mothers' **expectations to be in control** as potentially problematic if there was then a **mismatch between expectations and reality**. Interestingly, participants across the groups highlighted particular groups of women that could be more at risk, including teachers and women who have run their own businesses, as they are used to being in control (e.g. FG2; 26:619).

The code *perinatal circumstances* encompassed those aspects of the birth which HVs felt could be related to distress. They could be internal to the *mother*, part of the process of the *birth* or part of the *environment* in which the mother gave birth. In reality

these factors interacted, such as **unexpected medical interventions** (*birth*) meant that the *mother* ended up **feeling a failure**, potentially because of a **mismatch between expectations and reality**.

Lucy: ... for many women it's any intervention can be seen as traumatic, even just being induced, you know, having the drip put up, particularly depending on what their expectations are, so if you've got somebody that has been very much planning a normal delivery...just having the drip put up to start the delivery could be seen as quite traumatic for them, I think they can sometimes see it as failing...

(4:79)

**Feeling a failure** (where participants attributed emotional distress to mothers construing they had failed either in giving birth or as a mother) appeared under both *perinatal circumstances* and *postnatal circumstance*. Participants cited a number of reasons why this might arise, for example through **negative messages from staff**, which referred to occasions when participants discussed things mothers might overhear or see written about them by obstetric staff that mothers perceived to convey negative judgements about them,

Janice: ...I visited somebody and she ended up having a cesarean section and on the discharge thing it had put 'failure to progress' as a reason why she'd had a cesarean section and she took that very personally as an attack on her-...

Sally: [Like a personal failure (7:153)

**Feeling a failure** was closely linked to **feeling personally responsible**, although this latter code existed separately because participants did not always link the two

together. **Feeling personally responsible** was applied when participants noted that mothers sometimes felt their actions controlled how the birth progressed and therefore if it did not go as planned, or if something went wrong, it was their fault, which could be distressing. This was sometimes attributed to **staff implying mother's responsibility**.

*Postnatal circumstances* described those factors that could arise after the baby had been delivered and which participants felt could affect whether the mother developed symptoms of emotional distress or not. In keeping with the focus of HVs on *building and co-ordinating support networks*, participants felt that whether a mother had **access to appropriate support and care** postnatally played a role in whether she developed signs of emotional distress. This was raised by all three groups and articulated by the managers, and applied to instances where participants referred to whether a mother felt she could access the support she needed, either through formal services or informal social support systems. The restrictions on a mother's access to this support could be actual or perceived.

Amanda: ...sometimes nobody ever explores [that again, do they?... and for a lot of women...they really need to sort of unpick [that experience...and then they feel they can't actually talk about their labour... (10:222)

Some participants expressed that women who delivered babies later in life, perhaps because they worked in professional jobs, and were living away from their families, were more prone to both a lack of **access to appropriate support and care** and to **expectations to be in control**. As such HVs expected that they would be more likely to experience emotional distress postnatally. Linked to support were the **attitudes of others towards mother's distress**, applied to instances where participants implied or

stated that the reactions of others towards the mother's birth-related distress mediated the mother's distress and/or recovery.

Gemma: ...I think that because there is a lot of minimising that goes on, and not just by extended family members, by other professionals as well,...being left feeling that you're making a mountain out of a molehill is...hugely destructive...

(45:1076)

Above, Gemma clearly sets HVs apart from 'other professionals' when she suggests that people might minimise a mother's distress, but the analysis of group interactions suggested that \*minimising distress\* was also something that the participants occasionally engaged in.

Becky: ...because they may express in quite distressed ways at the primary contact how they've been and we invite them in a more light-hearted way really when they first attend postnatal group somewhere between eight and ten weeks...to talk about their experiences around the time of birth and they quite often repeat the same story so you hear *the same things* but...they'll inject some humour into it by then [because they're kind of dining out on it... (16:358)

Both Becky's conceptualisations of mothers' talking about their births as 'dining out' on them, and the invitations to talk about birth in a 'light-hearted way' could inadvertently make mothers feel they have to respond light-heartedly too, potentially leaving those mothers who are still distressed by the birth feeling that they are 'making a mountain out of a molehill' (Gemma; 45:1078).

A particular circumstance raised in all the focus groups and interviews was the idea that a mother's **fault in/lack of understanding of events** (*perinatal circumstances/postnatal circumstance; circumstances for birth trauma*; 'HVs models of (PN)PTSD') could be linked to distress. This code applied to instances where participants implied that mothers who did not fully comprehend the events of birth and reasons behind them were at risk of emotional distress.

Gemma: ...I've seen women...Push and push and push for two hours...And have ended up with a section and perhaps nobody's actually sat them down and said '...you did really well, you tried really hard it just wasn't going to happen'...whereas I think that when that doesn't happen...they don't get that opportunity to...have that explained, or they hear lots of negative things said to them at that crucial...time and I think that comes back to haunt them... (11:233)

The **fault in/lack of understanding about events** was applied to many aspects of the birth; Gemma related it to mothers **feeling personally responsible** and to **negative messages from staff**. In other cases it was related to a **mismatch between expectations and reality**. The idea that distress was related to a **fault in/lack of understanding of events** had implications for the interventions HVs felt to be appropriate (see 3.1.4). Interestingly, Melissa and Amanda expressed the idea that if this was addressed it could offset the impact of a 'difficult' delivery, such as having an emergency cesarean section, although it is unclear whether they considered these types of deliveries to constitute **traumatic deliveries**.

### 3.1.3 Resultant emotional distress.

The template highlighted concern among some participants as to whether PTSD could apply to birth (*PTSD not the right term*). This code did not necessarily reflect HVs rejecting the idea of manifestation of distress following birth, rather that ‘PTSD’ did not encapsulate women’s presentation and the idea that PTSD was subsequent to unusual events. In particular, participants in FG1 expressed the idea that **birth is not extreme/unusual enough** to cause PTSD. This code related to occasions when participants seemed to reject the concept of postnatal PTSD on the grounds that PTSD was caused by events that would probably be classified as ‘outside the normal range of human experience’ (APA; 1994) and that birth was too commonplace to fit this idea.

Janice: I think because birth happens to every mother (*laughs*)-

Louise: That’s right!

Janice: in the sense that it’s a lot more commonplace...whereas events such as war, injuries [car crashes or whatever are more unusual in some senses whereas

Sally: [Or major accidents and things

Janice: birth for the majority of women isn’t... (7:135)

While there was an acceptance amongst participants that a minority of births could meet that threshold, very few participants used the term ‘post-traumatic stress disorder’ or ‘PTSD’ during discussions. Instead, other constructions were suggested, such as ‘stress related to birth trauma’ (Louise; 5:95), and they used the term ‘trauma’ interchangeably with other terms. Participants often seemed quite uncomfortable with using ‘post-traumatic stress disorder’ or ‘PTSD’, which contrasted with their more



confident use of terms such as ‘psychosis’ and ‘OCD’ at other points throughout the groups.

Janice: So even the terminology throws us [*into (laughs)* what does it all mean?!

Sally: [Yeah

Janice: Like with this post-traumatic stress uuuuuurrrrr [*(laughs)* (72: 1740)

Uncertainty about how to construct the subsequent distress was also seen in relation to mothers who had experienced an objectively ‘normal’ birth as traumatic. Some participants perhaps felt **it’s all part of PND** (*PTSD not the right term*; ‘HVs models of (PN)PTSD’). For example, in the quote below, Justine starts off a mother’s story with ‘psychological trauma’ because of her expectations of the birth not being met, but then adds this to a number of other difficulties that arise postnatally and concludes that altogether this leads to postnatal depression.

Justine: I think psychological trauma surrounding childbirth or postnatally, because we have certain expectations and having had a baby if they are not met ...and a climax may be reached after four days and then it comes to reality ‘Oh, I have so many things ...to handle, the baby, my husband, to take care of myself...it begins to affect mum and that anxiety building up and ‘Am I able to cope ...?’ ...may lead to not being able to cope, not sleeping well, and other things that come with it...or ‘I may be stigmatised’ and that again complicates the whole thing and may culminate to [pause] what we term depression ((intonation up at the end as if a question)) (7:153)

This was also demonstrated in the following statement:

Serena: ...a good practitioner would realise that maybe the depression is related to a traumatic...birth...but she wouldn't necessarily...think 'This is the reason for her depression...'

(15:326)

Interestingly, Serena (15:326) and Lucy (8:169) both stated that they would not expect health visitors to distinguish between postnatal depression and postnatal trauma, whereas Melissa stated that she personally felt that she would (14:302).

Thus there was variation and vagueness in the terms used by participants to refer to the sequelae of **traumatic deliveries** and of 'normal' deliveries experienced as traumatic due to circumstances, which suggested a certain discomfort or lack of certainty in how best to label birth-related distress.

In relation to symptoms and/or effects it was often difficult to determine whether participants were attributing a particular effect to **traumatic deliveries**, 'normal' births experienced as traumatic or both. Few participants identified effects as specifically related to **traumatic deliveries**: Amanda noted that mothers might have a **clear memory for details of the birth**; Michelle gave an example of a mother who had **no more children** (also endorsed by Louise); Gemma suggested that **not talking about the birth** indicated that it had been a 'really really traumatic birth' (15:348); and Sally listed a number of possible symptoms of PTSD which generally concurred with diagnostic criteria for the disorder, including **flashbacks**. These possible effects were not raised by the remaining participants. However, most HVs seemed to perceive that **traumatic deliveries** had the **potential for lasting and recurrent effects** (*potential of birth to lead to trauma*; 'HVs models of (PN)PTSD'), such as when Annabel stated 'I don't know as...it ever leaves you (65:1588). There was also agreement that distress from either type

of birth could lead to **impaired bonding**. Other effects given by participants were either interpreted as related more to births experienced as traumatic due to circumstances, than to **traumatic deliveries**, or there did not seem to be enough evidence within the participant's utterance to relate the effect to one type of birth or the other.

#### *3.1.4 Managing the distress.*

**Traumatic deliveries** were conceptualised as leading to 'distress warranting specialist input' whereas when mothers experienced birth as traumatic due to antenatal, perinatal or postnatal circumstances, this led to 'distress warranting routine care'.

The first issue addressed here is that of **whose responsibility** ('Managing traumatic birth experiences'; *challenges working with mothers and families; challenges specific to traumatic birth experiences*) it is to ensure mothers who experience birth as traumatic have their needs met. This code referred to occasions when participants expressed confusion over whether birth-related trauma formed part of their remit, or when they expressed that meeting needs in this area would be the responsibility of another profession. While it was not raised by all participants, it was raised by two managers and implied by others.

Serena: ...for postnatal depression...it's the health visitor...whereas traumatic delivery happens while they're not involved...it's happened when the midwife has been leading and the obstetrician...So they should inform them they've had a bad time but actually I'd expect the midwife to probably lead it to a certain extent.

(48:1077-49:1090)

Care for PND and birth-related trauma is distinguished above: PND is perceived as the province of HVs because it manifests once the midwife is no longer involved;

birth-related PTS symptoms are the province of midwives because trauma occurs whilst they are leading the mother's care. Serena felt midwives would be aware of birth-related distress, presumably because of the objectively traumatic qualities that define **traumatic deliveries**, and should be responsible for addressing it.

HVs also seemed to use **distress severity** as a guide to whether they should manage a woman's care. This was relevant both to cases where the mother's distress was *more* than HVs felt they could manage, and to when it was *less* than their remit dictates they should be involved with.

Serena: ...a mother who's assessed to have some form of postnatal illness, whatever it's...we'd say '...you're a bit down at the moment, not sure what the reasons are' and give them an option of whether they want to see their GP...or whether they want to be supported for the next few weeks on what we call listening visits...or alternatively some people might want to go to something like a Mums in Mind group...I mean, these are the ones which are not severely, absolutely *suicidal*...but...the middle ground that just want supporting...

(18:394-20:424)

Serena highlighted that she did not expect HVs to use the cause of a mother's distress to help them decide how best to support them, rather the focus was on how severe the mother's distress was, with HVs managing those who form the 'middle ground'. It is likely that this is informed by the current emphasis on safeguarding children, which Serena felt was at the heart of the work of HVs (44:978).

In terms of what might be offered, Serena highlighted three main areas, although the template lists multiple options for supporting mothers identified by the participants, as well as sources of this support (see ‘Managing traumatic birth experiences’; *acting; sources of support* and *options for action*). Additional to these are the options HVs seemed to feel were their responsibility (see ‘Being a HV’; *HVs responsibilities*). These responsibilities were divided into two main areas; *building and co-ordinating support networks* and *supporting mothers directly*. The former referred to work HVs did to ensure mothers had appropriate sources of support for their needs outside that provided by HVs. This part of their role appeared to be seen as key by both HVs and their managers for all mothers and incorporated the codes: **refer on** (referring mothers to other services); **draw on family** (HVs speaking to family members to explain the mother’s difficulties and how they could help, and encouraging mothers to ask family for help themselves); and **promote and support help-seeking/social support** (encouraging mothers to seek support when they felt it was needed, either from formal services or through social circles and to help them with this if necessary).

Eileen: I think we would also involve other agencies, for example Home Start...to befriend...these women...we would still sort of visit as well but we would involve them [pause] Home Start, and I, I always ask people to get their extended family involved as well...just to support them, because it help, you know, if they even come in to hoover or something like that...it may not help, you know, with the trauma, but it will help, you know, in some way...to come to terms with it.

(39:915-40:941)

*Supporting mothers directly* referred to work HVs themselves might do to support women. HVs seemed to feel that the core of their direct work with women was to offer **listening visits**, a specific intervention consisting of a set number of visits, usually an hour long, additional to the standard visits for check-ups.

Regardless of whether HVs knew birth had been traumatic for a mother, they seemed to agree it was important to **give mothers a chance to talk about birth**. This code reflected occasions when HVs talked about either asking mothers about their birth or letting mothers talk about it if they raised it spontaneously. This could be covered either at their standard visits or through **listening visits** if the mother required more time.

However, some HVs expressed the idea that if a mother was experiencing emotional difficulties because of her birth she would need specialist input. The most common reason HVs felt they might refer a mother for specialist input was related to their feeling that they had a **lack of knowledge/expertise about birth**

Annabel: ‘...there are midwives that you can go and make an appointment with and go and discuss this’...I can’t say...whether it would have been the next step cos I’m not a midwife...but you need to go and talk to the people that were there at the time...and say ‘Why did you do this?’...

Gemma: And it does make sense sometimes when...women go through their notes and realise what happened at what point and what the thinking was behind that. (45:1084)

As shown in the above extract, concern regarded not being able to explain the physical aspects and process of birth and was linked to the idea that birth-related PTS symptoms were related to a **fault in/lack of understanding about the birth**. As such

this course of action was not always related to **traumatic deliveries** and was instead linked to occasions when HVs had identified that birth was the **cause of distress** ('Managing traumatic birth experiences'; *decision making; situation guides options*). However, there was a sense in both the focus groups and interviews that if mothers wanted to access this kind of service (either through **Birth Reflections** or through **professionals who assisted the delivery**) this in itself was an indicator of the birth being a really traumatic event for the mother (e.g. Gemma; 46:1117). This seemed to indicate a way of identifying birth-related trauma contrary to that usually expected; rather than identifying the nature and cause of the distress and then selecting the most appropriate intervention, the intervention was used to indicate the nature and cause of the distress. Again this points to possible difficulties among HVs in knowing how to identify birth-related PTS symptoms.

### 3.2 What are the training needs of HVs in relation to postnatal PTSD?

The above sections have highlighted a number of issues around HVs' understanding of birth-related PTS symptoms that suggest training for HVs regarding birth-related trauma might benefit them and the mothers they support. These issues are addressed in more detail in the Discussion. What follows here are some issues that arose from the data which might usefully guide the provision of any training.

As highlighted in *challenges working with mothers and families*, HVs felt that in general there was a **lack of training in mental health** for them, which hindered their work with many mothers.

Eileen: ...it's very difficult sometimes because...I'm not a counsellor...I don't have any special mental health training...apart from postnatal depression and depression... (50:1204)

However, as Eileen points out, they tended to have more confidence around postnatal depression, possibly linked to the fact that all participants had received two days of training on postnatal mental health, focusing on depression, within the last year. However, some participants felt that this lacked sufficient detail about what to actually do to support women (e.g. Lissa; 42:1007). Participants in FG2, though, highlighted that if they were trained to provide that input there would need to be changes to the way their caseloads were structured to allow them time to provide it properly

Annabel: I don't think I'm qualified enough to do that. I think in an ideal world if you were asking commissioners I would want a service that we could refer to [pause]... unless I'm given the training and then ...I totally agree with Gemma, I haven't got time to deliver that. (76:1842)

Although **training could be helpful** for HVs around birth-related trauma, they believed there were already **too many demands on HVs' time** potentially impacting on their work with mothers and their willingness and ability to attend training. An alternative suggestion from Lucy was to simply raise awareness of birth-trauma through journal articles or leaflets

Lucy: ...if things are presented in a way that gives you information...and you think '...I can see where that fits in with everything else' you're not asking people



to...do something different...you're arming them with another piece of a jigsaw...that might actually help their clinical practice. (42:943)

### 3.3 Summary

Template analysis provided a structure for analysing copious data collected through focus groups and interviews. Through the process of analysis a model was developed which offered an interpretation of the way in which HVs and their managers appeared to understand and correspondingly react to birth-related PTS symptoms. This model highlighted that HVs appeared to see that **traumatic deliveries** could be objectively identified through certain intrinsic qualitative aspects, although these were not clearly or completely expounded by participants. HVs expected that this type of delivery would lead to distress warranting specialist input. In cases where births did not possess the qualities which allowed them to be objectively judged as traumatic, it was still possible for mothers to experience births as traumatic in the presence of certain circumstances before, during and/or after the birth. In these cases the mothers experienced distress warranting routine care, which could be provided by the health visitors, either through them *building and co-ordinating support networks* around the mother, or through *supporting mothers directly*, particularly through **listening visits**. Certain aspects of this model and the way in which HVs spoke about trauma in general suggested that HVs might be better able to support mothers if they were provided with further information around birth-related PTS symptoms. However, insufficient time to attend training and low priority of the disorder appeared prominent concerns.

## 4. Discussion

This section provides a discussion of the main findings arising from the analysis. The model of HVs understanding of birth-related PTS symptoms expounded in the results is examined in light of theoretical models of PTSD and birth-related trauma and the wider context in which HVs work. Clinical implications of the interpretations are provided, followed by consideration of the study's limitations and possible directions for future research.

### 4.1 Interpretation of the Analysis

This study aimed to further understanding of the knowledge, attitudes and beliefs of HVs in relation to birth-related PTS symptoms. The model constructed through the process of analysis illustrated two routes by which HVs perceived experiences during birth could lead to distress. The two routes started with the distinction between objectively 'normal' births and **traumatic deliveries**, the latter of which HVs seemed to perceive as having qualities that allowed them to be objectively identified as traumatic. HVs tended to rely on normative understandings of what these qualities were and the actual nature of them was rarely explicitly stated. However, occasions when the mother and/or infant were at **risk** were invoked as contributing to **traumatic deliveries**. Research has identified that a diagnosis of PTSD is associated with mothers' fears for the safety of herself and the infant (e.g. Wijma et al.; 1997), although this is not necessarily commensurate with objective indicators of risk. This focus on risk and objectively traumatic qualities seems to echo early diagnostic criteria for PTSD that emphasised the nature of the event, rather than a person's reaction to it (prior to DSM-IV; APA, 1994).

In cases where mothers did not experience **traumatic deliveries** but still experienced birth as traumatic, HVs cited numerous possible circumstances that could lead to this. Many of these concurred with risk factors identified in the empirical literature, such as **feeling out of control** (Soet et al.; 2003) and **mismatch between expectations and reality** (Czarnocka & Slade, 2000; Soet et al., 2003). Importantly, (outside the realm of **traumatic deliveries**) participants recognised the role of women's perceptions of the birth experience, which research has highlighted as paramount in the development of PTS symptoms (Slade; 2006). Thus the phenomenology described by HVs appeared to match that described in the literature, suggesting they do encounter women who have experienced birth as traumatic in their clinical practice.

Despite this, there seemed to be a notable reluctance amongst participants to label this distress as PTSD or PTS symptoms, which may have resulted from a lack of a theoretical understanding of the disorder. This was suggested by the minimal attention that participants appeared to afford the role of meaning of events during birth. According to the cognitive model of PTSD, it is the meaning of events for the person's view of him/herself, others and the world which is relevant for trauma (Ehlers & Clark; 2000). Contrastingly, data collected in the focus groups, as already noted, seemed to indicate that HVs focused more on objective, concrete aspects of childbirth, without linking them to their meaning for the mother and the implications for her. However, it is important to recognise that, although less strongly emphasised, HVs did allude to the role of meaning, for example when discussing the *circumstances* **feeling a failure** and **feeling personally responsible**. These kinds of appraisals could certainly be seen as potentially affecting a mother's view of herself. Participants also then linked these two *circumstances* to some

of the more objective factors, both obvious ones such as **unexpected medical interventions**, and more subtle, such as **negative messages from staff**. It is possible that views regarding meaning were suppressed in the focus groups because participants felt they contradicted the views of more dominant members and they therefore did not feel comfortable expressing them. This may have created a false impression that HVs focused on the objective factors at the expense of meaning.

In the absence of a theoretical understanding of PTS symptoms/PTSD, and given the substantial overlap in symptoms and comorbidity between PND and PTSD (White et al.; 2006), HVs perhaps felt more comfortable using PND to explain the phenomena they observed. Recent training meant participants had a structured theoretical understanding of PND and there are clear care pathways guiding its management. This may be attractive to HVs who noted that their nursing background means they feel **pressure to do something** (*professional judgement and personal preferences; decision making; ‘Managing traumatic birth experiences’*) to **make people feel better** (*underlying principles of being a HV; ‘Being a HV’*). However, the options for managing the care of women with PND (usually listening visits, GP or support groups) may be insufficient for women experiencing PTS symptoms. Although HVs would refer to the GP for a comprehensive assessment if there was no subsequent improvement, via which the mother might be referred to a specialist service such as clinical psychology, access to appropriate care would have been delayed.

The above interpretation suggests a gap or misunderstanding in HVs knowledge of birth-related PTSD. However, consideration of the context in which HVs work is also relevant. As part of *perinatal factors*, HVs often noted the role of the environment,

particularly aspects of interactions between mothers and obstetric staff, as creating circumstances that could lead women to experience birth as traumatic. However, analysis of the interactions showed these implications were often followed by statements \*excusing others professionals\*, such as an acknowledgment of the difficult working conditions of obstetric staff. For example, following a discussion about the impact of obstetric staff implying maternal responsibility, Gemma stated ‘...it’s very difficult because when you are looking at...the mechanics of getting a child out alive...probably the professionals don’t think very hard about what they verbalise’ (12:257). This statement embodied a belief that a greater pressure on the staff (getting the child out alive) takes priority over a mother’s possible need for information and support. PTSD has been described as the diagnosis which has had the most ‘dramatic and pervasive impact on law and social justice’ (p23, Stone, 1993; cited by Brewin, 2003). This is notable because there is the idea that PTSD, more so than with other diagnoses, can be traced back to an event, for which someone can be held accountable. It is possible HVs were reluctant to associate birth with ‘PTSD’ because it potentially confers blame on obstetric colleagues. However, if this is the case there may be serious implications for women whose distress may be minimised, disregarded or misconstrued.

It may also be relevant to consider what HVs perceive their role to comprise. In terms of identifying PTSD or PTS symptoms, participants in FG1 seemed to feel that applying this label constituted ‘diagnostics’, another professional’s responsibility. However, given several HVs seemed happy to use diagnostic labels such as ‘OCD’ and ‘ADHD’, this may actually provide further evidence that it is something about the label ‘PTSD’ which is particularly problematic.

There was also the question over **whose responsibility** it was to identify and manage the care of women who experience birth trauma. Serena suggested that PND was the remit of HVs because it manifests whilst HVs are leading mother's care, contrasted with PTSD which arises when the midwife is leading and is thus the remit of midwives. Subsequent to these beliefs, HVs may be more likely to construct distress that arises when they are leading women's care as PND on the assumption that any birth-related distress will have been addressed by the midwife. However, there are numerous difficulties with this, some noted by Serena, including distinguishing 'normal' birth-related changes in the early postpartum from distress indicating more serious issues and that distress often becomes apparent only once the partner returns to work. This may be further complicated by the finding that women vary in the time after delivery at which they experience PTS symptoms (Soderquist, Wijma & Wijma; 2006). These issues seem to indicate that HVs are actually better placed than midwives to identify women who have experienced birth as traumatic and that the current confusion over responsibility may result in many women's distress being misconstrued as PND, thus leading to the provision of inappropriate care.

Within the wider context it was noted that HVs felt **distress severity** was an important guide for them in deciding how to support someone. It seems likely that this is closely linked to their role in safeguarding children, emphasised by several recent high-profile cases of children dying through neglect and maltreatment (e.g. Baby Peter). As such, if HVs do not feel that PTS symptoms pose any significant risk to children's well-being, it may be seen as low priority. This national focus on risk may also have contributed to introduction of the 'two questions' (NICE; 2007) for identifying

postpartum emotional distress. HVs almost universally expressed dissatisfaction at having to use the ‘two questions’ because they felt the narrow focus may give the impression of dismissing distress not covered by the questions. Indeed, it seems unlikely that the phrasing of the two questions would encourage mothers to raise issues related to trauma. This may further compound the difficulties for HVs in identifying mothers who might be suffering PTS symptoms but who did not experience an objectively traumatic delivery.

In relation to care for mothers, HVs emphasised the role of **access to appropriate support and care** in the development and maintenance of postnatal emotional distress, as well as their role in building support networks for postnatal women. Research has shown social support is an important predictor of PTSD symptom severity (Brewin et al.; 2000) and that it may play an important role in the development of long-term PTS symptoms following childbirth (Ford et al; 2010). Thus, for some women, facilitating support networks might be sufficient for their recovery. However, although more research is needed, there is some indication that the presence of negative social attitudes might be more important for PTS symptom severity than the provision of positive social support (Ullman et al; 2007). HVs showed awareness of this issue, as when **attitudes of others towards distress** and **having experiences heard and believed** were highlighted as important mediators of distress.

While appropriate social support will be helpful for many women, it may not always be sufficient. HVs often cited referring women to services that **promote understanding of birth** (such as **Birth Reflections** and **professionals who assisted the delivery**). This was based on the belief that a **fault in/lack of understanding of events**

was often linked to women experiencing birth as traumatic. While feeling poorly informed has been cited as a risk factor for PTS symptoms (Lyons; 1998), the idea that providing the ‘correct’ information after the event can prevent or relieve PTS symptoms may be misplaced. The cognitive model proposes that traumatic memories are not easily modified because of the way they are encoded, so trauma related to a **fault in/lack of understanding of events** cannot be resolved simply by giving someone alternative information. Reviews of the research into the effects of these services for women following birth has concluded that while it might be appropriate to offer some women the opportunity to discuss their birth, evidence does not support ‘debriefing’ and women who develop PTS symptoms need specific treatment (Rowan, Bick & de Silva Bastos; 2007). That HVs seemed to consider these services appropriate for women who experienced **traumatic deliveries** (i.e. women HVs perceived as most at risk of developing PTSD) suggests that many women may be delayed in accessing appropriate care.

#### 4.2 Clinical Implications

HVs raised concerns about the feasibility of providing mental health support due to pressures on their time, thus it is not proposed they should play a role in managing PTS symptoms beyond what they already offer. However, HVs are ideally placed to identify those women experiencing PTS symptoms and refer them for support. Several issues though, including a potential lack of theoretical understanding and a focus on PND, may limit HVs in identifying these women, thus hampering their access to this support. This indicates a number of lines of action.

Firstly, providing HVs with a theoretical understanding of PTSD and its sequelae may help them feel more confident in identifying these difficulties. Information collected



here suggests that the cognitive model of PTSD (Ehlers & Clark; 2000) offers a suitable theoretical framework to present to HVs as much of their understanding could be mapped on to it and it is recognised as the ‘most detailed account’ (p.364) of PTSD, well supported by empirical evidence (Brewin & Holmes; 2003). In providing this information, the context in which HVs are working needs to be taken into consideration (for example, their possible fears about ‘blaming’ obstetric staff). Also, concerns about time constraints means formal ‘training’ may not be appropriate and provision of information through leaflets and articles may be more effective.

Clinical psychologists’ knowledge of a range of psychological models of trauma and their experience of providing training in understanding psychological distress to other staff groups suggests they may be appropriate professionals to support the development and provision of training for HVs. Clinical psychologists’ skills in understanding staff teams should help ensure training content and provision were sensitive to the context in which HVs work and recognises and respects the high level of qualification and years of experience HVs have. Therefore, input from clinical psychologists must be negotiated with the HV team requesting it. This training could be provided either as part of the qualification to become a HV or as post-qualification training.

Secondly, HVs need support to conduct more structured assessments of women’s birth experiences. Although participants agreed it was important for women to talk about their birth experiences, this did not always happen as other things took priority, such as infant well-being. Increasing the priority of assessing birth experiences will likely require top-down adjustments, for example by including it in policies and targets. As the

managers felt that there was currently a **lack of awareness/agenda at higher levels** regarding birth-related trauma, raising the awareness of the disorder and its potential sequelae with commissioners and service managers is necessary.

HVs could be helped in the assessment of birth experiences by the use of a structured interview or assessment tool (e.g. Samson, Bensen, Beck, Price & Nimmer; 1999). Additionally, existing research and participants here have identified a number of antenatal risk factors associated with the development of PTS symptoms after birth. These could be used to help HVs identify women at greater risk of experiencing birth as traumatic, allowing the provision of targeted support prior to, during and after birth.

Clinical psychologists could support the development of a birth experience assessment tool, drawing on their knowledge of standardised assessments and psychological distress associated with trauma. The importance of focusing on distress and individual symptoms, rather than a diagnosis of PTSD *per se*, for determining who requires support, can be debated but, from the data collected here, it seems likely that HVs would more willingly accept a focus on distress, not diagnosis. This development should be conducted in conjunction with HVs and their managers, whose experience of working with women at this time would be central to informing the content, design, presentation and administration of any such tool.

Thirdly, HVs might benefit from better links with mental health services as research has shown that primary care clinicians with better links to mental health teams are more likely to take some form of clinical action for people with PTSD (Meredith et al.; 2009). Improving links between HVs and relevant mental health care professionals, such as clinical psychologists, should include encouraging HVs to seek advice, and

support for making appropriate referrals. This could be through direct contact between HVs and clinical psychologists, or indirectly such as by clinical psychologists providing input to HVs' managers in their support of HVs working with women who have experienced a traumatic birth. This may be especially important as, beyond Birth Reflections, participants had few explicit ideas about who should provide input for mothers with PTS symptoms. It may be appropriate for training/information to be provided by these same professionals to promote closer working relationships.

Through supporting women with traumatic birth experiences, HVs may become aware of issues within the delivery environment that are related to women's negative birth experiences. It is appropriate for these to be fed back to obstetric staff so they can take remedial action. However, if HVs are concerned about the potential for 'blame' they may be less willing to do this. To mitigate, channels for feeding this information back should be clearly identified and emphasis placed on the opportunity for quality improvements to the birth experiences of all mothers. Melissa described a similar approach in her service through regular meetings between midwifery and health visiting managers.

#### 4.3 Limitations of the Research

Although qualitative research tends to emphasise depth and meaning more than generalisable results, it must be acknowledged that this data was from a small and homogenous sample. All participants except one manager were from one county and all had recently received similar training. This training could reasonably be seen to have had a huge impact on their understanding of postnatal mental health in general. As such these

results cannot be taken as generalisable to other teams without further research (see below).

It has been suggested that the context of focus groups can constrain the information participants give, both in terms of what they do say and what they do not (Hollander; 2004). Analysis of group interactions in this study has not been fully reported here. However, there seemed to be many more interactions promoting a common ground than ones challenging it. Potentially this reflected shared opinions but according to Sim (1998), it is more likely it reflected ‘an emergent property of group interactions’ (p.345). This seemed exemplified in FG1 where Sally, due to her own experiences and interests, appeared more accepting of the idea of birth-related PTSD than other group members. However, those contributions that reflected this acceptance were often met either by silence from group members or by a ‘Yes, but...’ type of response, after which Sally tended to provide a response more in line with the apparent attitudes of the other participants. Thus, ideas expressed by participants may have only reflected the dominant themes in each group and alternative discourses may have been silenced. As such this may have influenced the findings; attitudes that may have been particularly marginalised were those which, like Sally and Melissa, were potentially more accepting of the idea of birth trauma. Had interviews been conducted instead, as with Melissa, these views may have been more visible. In particular, it has been suggested that HVs focused more on the objective aspects of childbirth and less so on the ‘meaning’ of the events, but this may have been the result of the interactions between participants such that discussion of ‘meaning’ was suppressed. Therefore, suggestions that these findings may reflect the ‘true’ beliefs of HVs regarding birth trauma, and the implications of those, must be

treated with caution and further work is needed before time and effort are expended in implementing service changes on the basis of these results.

Due to the large amount of data, numerous decisions were taken regarding how to present data and what to include and leave out. Although all possible attempts were made to justify these decisions, there will inevitably be an influence of the researcher's position and knowledge base on what is presented. Of particular note amongst that left out was a closer examination of the way HVs constructed their role as reflected in template under 'Being a HV' and the effects of birth on partners.

In terms of presentation of the data, the approach taken seemed to reflect a rather 'diagnostic' stance, which did not necessarily reflect that of participants. This is of relevance as the validity of PTSD as a diagnosis has been more closely scrutinised and questioned in the wider literature than most psychiatric diagnoses (e.g. Brewin; 2003). Brewin particularly notes the argument that PTSD is a social construct that pathologises human experiences. This seems to resonate with the views of those participants who felt childbirth was too common an occurrence to lead to PTSD. The diagnostic approach to PTSD has certainly influenced the findings presented here; for example it led to the prioritisation of issues such as HVs reluctance to use the term 'PTSD' and perhaps to diminution of issues such as HVs' awareness of individual symptoms. Utilising a purely diagnostic stance to determine who receives support for birth trauma could result in women with only one or two symptoms (e.g. flashbacks) being neglected, despite potentially experiencing significant distress as a result of the symptom(s). This distress may be enough to interfere with their care of and bond with the infant and their relationships, thus spreading the impact of the trauma. As such the way in which the

results have been presented here may not translate directly to clinical practice and the importance of the participants' focus on individual experiences and symptoms could have been afforded greater priority.

#### 4.4 Future Research

In light of the limited generalisability of these results, but also the important potential clinical implications, further research is certainly warranted. In particular, understanding how representative these results are of the wider profession of HVs is important. Had there been more time available, focus groups with purposively sampled participants would have been convened in order to examine potential differences between certain sectors of HVs (e.g. did attitudes differ between HVs with their own children and without, or depending on length of time qualified, or age, or gender and so on). While a questionnaire could survey understandings and beliefs of a larger sample, the information reported in this study may still be insufficient to construct a valid questionnaire. It may be appropriate to consider a mixed-methods approach incorporating qualitative exploration, such as focus groups, to inform construction of a questionnaire for distribution to a wider sample (O'Brien; 1993).

Given participants appeared to view themselves as one fragment of a web of services for mothers who have experienced birth as traumatic (e.g. '...they would like to support mums...like to be part of that chain...' (Serena; 30:663)), exploration of the understandings of postnatal PTSD held by other professionals is justified. In particular, participants alluded to midwives' and GPs' roles. Although not possible within the constraints of this research, a priority focus for future research should exploration of the attitudes and opinions of midwives and GPs regarding postnatal trauma. This

triangulation would provide information that seems crucial to building a more complete understanding of the care received by women suffering after a traumatic birth experience. Although this study has provided some data which could usefully inform the design of that research, the limited generalisability to other HVs, let alone other professions, may mean that exploratory qualitative research is the most appropriate starting point.

Within the wider context of birth-related trauma, the beliefs and attitudes of participants in this study have raised a number of other questions that deserve further examination. Two areas are of special note; firstly, HVs questioned the utility of birth plans and their potential traumagenic role in women's birth experiences because they may engender spurious beliefs about the reality of controlling birth. If research supported this hypothesis, there would be potentially important clinical implications for the ways women are supported when preparing for birth. Secondly HVs spoke quite extensively about the traumagenic potential of witnessing the birth for partners. Given the importance of social support for women who have experienced birth as traumatic (Ford et al.; 2010), a mother's recovery may be slowed if her partner is also struggling with emotional difficulties. Research that furthers our understanding of HVs' perspectives on partners' trauma therefore seems prudent, incorporating a focus on how HVs might provide care to either just the father or to both parents as necessary.

#### 4.5 Conclusions

This study aimed to explore the ways in which HVs understand birth-related trauma and their beliefs and attitudes regarding it. Analysis of focus group and interview data suggested a model of HVs understanding, with two routes from birth to distress. The first route emphasises objectively identifiable aspects of birth which lead directly to

distress that requires specialised care. The second route starts with an objectively 'normal' birth, and, taking a more holistic view of the mother and her environment, emphasises the role of various circumstances in mothers experiencing the birth as traumatic. This route leads to emotional distress which HVs felt could be managed through the provision of routine care. Despite the overlap between the phenomenology described by HVs as related to trauma and the risk factors described in the literature, there was a sense that HVs lacked an overall theoretical understanding of trauma. Coupled with the prevalent focus on PND these issues suggest HVs may struggle to identify and support women experiencing PTS symptoms. A number of clinical implications arise from these interpretations, along with possible directions for future research.



## 5. References

Allen, S. (1998). A qualitative analysis of the process, mediating variables and impact of traumatic childbirth. *Journal of Reproductive and Infant Psychology*, 16(2), 107-131.

American Psychiatric Association (1980). *Diagnostic and statistical manual of mental disorders*. 3<sup>rd</sup> Ed. Washington, DC: Author.

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders*. 4<sup>th</sup> Ed. Washington, DC: Author.

Andrews, B., Brewin, C.R. & Rose, S. (2003). Gender, social support and PTSD in victims of violent crime. *Journal of Traumatic Stress*, 16(4), 421-427.

Bailey, J. (2008). First steps in qualitative analysis: Transcribing. *Family Practice*, 25, 127-131.

Ballard, C.G., Stanley, A.K. & Brockington, I.F. (1995). Post-traumatic stress disorder (PTSD) after childbirth. *British Journal of psychiatry*, 166, 525-528.

Brewin, C.R. (2003). *Post-traumatic Stress Disorder: Malady or myth*. New Haven, USA: Yale University Press.

Brewin, C.R., Andrews, B. & Valentine, J.D. (2000). Met-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, 68(5), 748-766.

Brewin, C.R. & Holmes, E.A. (2003). Psychological theories of posttraumatic stress disorder. *Clinical Psychology Review*, 23, 339-376.

Casebeer, A. & Verhoef, M. (1997). Combining qualitative and quantitative research methods: Considering the possibilities for enhancing the study of chronic diseases. *Chronic Diseases in Canada*, 18(3), 130-135.

Czarnocka, J. & Slade, P. (2000). Prevalence and predictors of post-traumatic stress symptoms following childbirth. *British Journal of Clinical Psychology*, 39, 35-51.

Darby, J.C., Robertson, N. & Herdman, J. (in press). Impact of birth experience on the infant: A systematic review.

Department of Health (2004) *National Service Framework for Children, Young People and Maternity Services*.

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4089101](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4089101)

Department of Health (2007) *Facing the Future: a review of the role of health visitors*,  
[www.dh.gov.uk/cno](http://www.dh.gov.uk/cno)

Department of Health (2009) *Healthy Child Programme: Pregnancy and the first five years of life*.

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_107563](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107563)

Duggleby, W. (2005). What about focus group interaction data? *Qualitative Health Research*, 15(6), 832-840.

Ehlers, A. & Clark, D.M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, 38, 319-345.

Ford, E., Ayers, S. & Bradley, R. (2010). Exploration of a cognitive model to predict post-traumatic stress symptoms following childbirth. *Journal of Anxiety Disorders*, 24, 353-359.

Freeman, T. (2006). 'Best practice' in focus group research: making sense of different views. *Journal of Advanced Nursing*, 56(5), 491-497.

Hazelton, M., Rossiter, R. & Milner, J. (2006) Managing the 'Unmanageable': Training staff in the use of dialectical behaviour therapy for borderline personality disorder.

*Contemporary Nurse*, 21(1), 120-130.

Hollander, J.A. (2004). The social contexts of focus groups. *Journal of Contemporary Ethnography*, 33, 602-637.

King, N. Template Analysis website.

[www.hud.ac.uk/hhs/research/template\\_analysis/index.htm](http://www.hud.ac.uk/hhs/research/template_analysis/index.htm) (accessed 22nd January 2010).

King, N. (2004). Using templates in the thematic analysis of text. In Cassell, C & Symon, G. (Eds) *Essential Guide to Qualitative Methods in Organizational Research* (p256-270). London, UK: Sage.

King, N., Carroll, C., Newton, P. & doman, T. (2002). "You can't cure it so you have to endure it": The experience of adaptation to diabetic renal disease. *Qualitative Health Research*, 12, 329-346.

Kitzinger, J. (1995). Qualitative research: Introducing focus groups. *British Medical Journal*, 311(7000), 299-302.

Lambert, S.D. & Loiselle, C.G. (2008). Combining individual interviews and focus groups to enhance data richness. *Journal of Advanced Nursing*, 62(2), 228-237.

Lehoux, P., Poland, B. & Daudelin, G. (2006). Focus group research and “the patient’s view”. *Social Science and Medicine*, 63(8), 2091-2104.

Liebschutz, J. Saitz, R., Brower, V., Keane, T.M., Lloyd-Travaglini, C., Averbuch, T. & Samet, J.H. (2007). PTSD in urban primary care: High prevalence and low physician recognition. *Society of General Internal Medicine*, 22, 719-726.

Lucock, M.P., Mirza, M., & Sharma, I. (2007) Service users’ views of a self-help pack for anxiety. *Journal of Mental Health*, 16(5), 635 - 646.

Lyons, S. (1998). A prospective study of post traumatic stress symptoms 1 month following childbirth in a group of 42 first-time mothers. *Journal of Reproductive and Infant Psychology*, 16, 91-105.

Madill, A., Jordan, A. & Shirley, C. (2000). Objectivity and reliability in qualitative analysis: Realist, contextualist and radical constructionist epistemologies. *British Journal of Psychology*, 91, 1-20.

Meredith, L.S., Eisenman, D.P., Green, B.L., Basurto-Davila, R., Cassells, A. & Tobin, J. (2009). System factors affect the recognition and management of posttraumatic stress disorder by primary care clinicians. *Medical Care*, 47(6), 686-694.

Miller, D. & Jaye, C. (2007). GPs Perception of Their Role in the Identification and Management of Family Violence. *Family Practice*, 24, 95-101

Moleman, N., van der Hart, O. & van der Kolk, B. (1992). The partus stress reaction: A neglected etiological factor in postpartum psychiatric disorders. *The Journal of Nervous and Mental Disease*, 180(4), 271-272.

Morgan, D. (1996). Focus Groups. *Annual Review of Sociology*, 22, 129-152.

National Institute for Clinical Excellence (2007). Antenatal and postnatal mental health: Clinical management and service guidance. [www.nice.org.uk/CG045](http://www.nice.org.uk/CG045)

National Institute for Clinical Excellence (2005). Post-traumatic Stress Disorder (PTSD): The management of PTSD in adults and children in primary and secondary care. [www.nice.org.uk/CG026NICEguideline](http://www.nice.org.uk/CG026NICEguideline)

O'Brien, K. (1993). Improving survey questionnaires through focus groups. In Morgan, D.L. (Ed) *Successful Focus Groups: Advancing the state of the art* (p105-117). Newbury Park, California: Sage.

Offord, R.E., Hardy, G.E., Lamers, C., & Bergin, L. (2006). Teaching, teasing, flirting and fighting: A study of interactions between participants in a psychotherapeutic group for people with dementia. *Dementia*, 5, 167-195.

Olde, E., van der Hart, O., Kleber, R. & van Son, M. (2006). Posttraumatic stress following childbirth: A review. *Clinical Psychology Review*, 26(1), 1-16.

Oliver, D.G., Serovich, J.M. & Mason, T.L. (2005). Constraints and opportunities with interview transcription: Towards reflection in qualitative research. *Social Forces*, 84(2), 1273-1289.

Potter, J. & Hepburn, A. (2005). Qualitative interviews in psychology: Problems and prospects. *Qualitative Research in Psychology*, 2(4), 281-307.

Roberts, C. (2004). *Qualitative Data Analysis: Transcribing Spoken Discourse*. FDTL Data Project. [www.kcl.ac.uk/schools/sspp/education/research/projects/dataqual.html](http://www.kcl.ac.uk/schools/sspp/education/research/projects/dataqual.html) (accessed 6<sup>th</sup> January 2010).

Rowan, C., Bick, D., da Silva Bastos, M.H. (2007). Postnatal debriefing interventions to prevent maternal mental health problems after birth: Exploring the gap between evidence and practice. *Worldviews on Evidence-Based Nursing*, 4(2), 97-105.

Samson, A.Y., Bensen, S., Beck, A., Price, D. & Nimmer, C. (1999). Post-traumatic stress disorder in family care. *Journal of Family Practice*, 48, 222-227.

- Sim, J. (1998). Collecting and analysing qualitative data: Issues raised by the focus group. *Journal of Advanced Nursing*, 28(2), 345-352.
- Slade, P. (2006). Towards a conceptual framework for understanding post-traumatic stress symptoms following childbirth and implications for further research. *Journal of Psychosomatic Obstetrics and Gynaecology*, 27(2), 99-105.
- Soderquist, J., Wijma, K. & Wijma, B. (2006). The longitudinal course of post-traumatic stress after childbirth. *Journal of Psychosomatic Obstetrics and Gynaecology*, 27(2), 113-119.
- Soet, J.E., Brack, G.A. & Dilorio, C. (2003). Prevalence and predictors of women's experience of psychological trauma during childbirth. *Birth*, 30, 36-46.
- Ullman, S.E., Filipas, H.H., Townsend, S.M. & Starzynski, L.L. (2007). Psychosocial correlates of PTSD symptom severity in sexual assault survivors. *Journal of Traumatic Stress*, 20(5), 821-831.
- White, T. Matthey, S., Boyd, K. & Barnett, B. (2006). Postnatal depression and post-traumatic stress after childbirth: Prevalence, course and co-occurrence. *Journal of Reproductive and Infant Psychology*, 24(2), 107-120.



Wijma, K., Soderquist, J. & Wijma, B. (1997). Posttraumatic stress disorder after childbirth: a cross sectional study. *Journal of Anxiety Disorders*, 11, 587-597.

### **Part Three: Critical Appraisal**

## Critical Appraisal

This chapter provides a critical evaluation of the research process organised as a temporal account around themes derived from a reflective journal that was written throughout the course of the project.

### 1.1 Finding My Feet

The 'research fair was helpful in identifying a project that would be relevant and useful to clinical practice and my attention was caught by the issue of trauma arising from labour and delivery. Trauma was an area of interest to me already and I was intrigued by the idea that it could be related to something with all the positive connotations of birth. Additionally, my interest in maternal mental health and mother-infant relations was gradually increasing through teaching and my clinical work and meeting with potential field supervisors to discuss their work with mothers for whom birth had been traumatic cemented my enthusiasm for research relating to birth trauma.

### 1.2 Firming the Ground

As I became more familiar with the literature surrounding birth trauma I was particularly struck by the focus of local and national level guidelines on postnatal depression (PND), with at most a brief mention of the possibility that women might experience the birth as traumatic (e.g. NICE; 2007). I began to consider the potential effects on professionals supporting women during the postpartum period and how relevant they felt birth trauma was to their work. A search of the literature regarding professional understandings of and work with postnatal trauma identified no studies in this area. Two leading UK-based researchers in postnatal PTSD agreed that this was an

under-studied area and that exploration of this topic would be a very useful addition to the growing literature on traumatic birth experiences.

My initial ideas related to quantifying how ‘accurately’ professionals could distinguish between PND and symptoms related to trauma using video vignettes. However, it became clear that setting this up to reflect clinical practice required more time and resources than were available. Gathering data using questionnaires was rejected as the dearth of literature in this area meant there was no existing data on which to base the questions. Hence I decided to focus on exploring how professionals understood and responded to women experiencing symptoms of postnatal PTSD. I hoped this would provide insight into how professionals might approach their work with women who have experienced childbirth as traumatic and help identify any gaps in the support of them.

### 1.3 Decisions, Decisions, Decisions

The following weeks and months are characterised in my mind by decision-making, which was challenging for me due to a continual fear of making the ‘wrong’ decision.

#### *1.3.1 Participants.*

My initial focus was on GPs, but consultation with relevant professionals about the respective roles and involvement of each professional group with women in the postpartum period suggested health visitors (HVs) would be more appropriate. Although the specific roles of each profession vary depending on local service agreements, a consensus emerged indicating that HVs constitute the ‘first line’ of healthcare provision in the postnatal period through frequent and regular contact with mothers and families. Midwives were excluded because their input generally only extends two weeks into the

postnatal period at which point care is transferred to the health visitor. Furthermore, the Healthy Child Programme (HCP; DoH; 2009) states that integrated maternity service teams should be led by HVs and that HVs have particular responsibility for delivering the HCP, which emphasises the role of good parental mental health in child development. Thus identification and support of women with postnatal PTSD should be an integral part of the role of HVs, hence they were chosen as the target population for this research project.

During the course of this research, HVs highlighted that much of their work with mothers who have experienced birth as traumatic involves an interface with both GPs and midwives. As such it would have been useful to convene a group with each of these professionals to explore their perceptions of birth trauma but there was insufficient time for this, although it is certainly an area for future research.

### *1.3.2 Choice of methodology.*

The paucity of literature in this area and, consequently the research questions, indicated a qualitative approach to this research project. Although individual interviews would have been appropriate, focus groups were selected as the method of data collection for a number of reasons. Reflection on the trainee's epistemological stance identified a position of contextual constructionism, where the meaning that individuals attribute to their experiences is seen to be influenced by the broader social context in which they live (Madill, Jordan & Shirley; 2000). Given that I was interested in exploring how health visitors understood the concept of postnatal trauma it made sense to me, therefore, to select a method that allowed for the social construction of the concept. This seemed particularly relevant given that I did not expect all health visitors to be familiar with the

term and an interview approach may have led to too much of my own perspective being imposed on their expressed views.

#### *1.3.3 Peer review.*

As well as informal communications with colleagues and experts within the field of postnatal trauma I submitted my proposal to two separate and independent parties for peer review. My original proposal included pilot groups to test the topic schedule; it was noted in the peer review that not using this data may render it unethical. Instead feedback forms were provided, allowing participants to suggest improvements to the running and management of subsequent groups. I discussed the topic schedule with my supervisors and made some minor changes in wording as a result. The peer review also led me to develop the Brief Information Sheet as a stimulus should I feel, or a group express, that their knowledge regarding birth-related PTSD was sufficiently limited that discussions would be affected. In addition to the changes cited above, I had continually made numerous other changes at the recommendation of others but I finally realised that it would never be a ‘perfect’ proposal and that as someone would always be able to suggest changes, I had to make a decision at some point to submit it to ethics.

#### *1.3.4 Ethics and R&D.*

Completing the ethics form was, to quote one of my peers, ‘*simultaneously the most challenging and most boring*’ thing I have done and was the least enjoyable part of the research process. Again my fears about ‘getting it wrong’ were prevalent and meant that I was probably over-inclusive. However, the committee requested only a few minor amendments to the documents and ethical approval was received in early April 2009.

I became frustrated as I learned that each Research & Development (R&D) department operated very differently and there was a significant delay when one department requested evidence that I was insured should anything go wrong during the course of the research. I was unable to find anyone who had come across this request before and had difficulty locating someone at the university who could provide such evidence. R&D approval was delayed elsewhere because they could not decide who should be consulted about the research and who the appropriate person to sign the forms was. I think this was partly a factor of my lack of contacts with each HV team prior to starting this research and the research overall may have run better had I had more pre-existing links in this area.

#### 1.4 Doing the Research

##### *1.4.1 Recruitment.*

My initial excitement about starting recruitment was heightened when I quickly received a couple of expressions of interest. However, it gradually faded over the summer and by the beginning of August I had only been contacted by six volunteers. One health visiting team manager informed me that ‘swine flu’ had represented a significant increase in the workloads of many health visitors due to vaccination programmes for the under-5’s. She suggested this could account for the poor recruitment rates and that it would continue to have an impact.

Initially I addressed this by sending out follow-up letters reminding health visitors about the study. Unfortunately this was delayed as it constituted a substantial amendment to the procedure so required further ethics approval. On reflection I should have planned

to send follow-up letters from the start as problems recruiting health professionals are well-recognised.

By mid-October I had enough health visitors from one PCT to convene a group and over the next couple of weeks a few more volunteers came forward. I was dismayed when several volunteers stated that they had not received the initial information sheet and had only become aware of the study through the follow-up letter. I had discussed and agreed the procedures for sending out the information sheets with each team manager on the assumption that they would know how best to filter information to the health visitors. However, in hindsight, a more direct approach to recruitment (e.g. attending meetings) may have produced better recruitment rates.

Overall, the participants constituted a fairly homogenous group; all participants were women, all but one were white and all but one were aged over 40 years. In general I feel this probably reflects the make-up of this profession; indeed it was noted during one of the interviews that the route to becoming a health visitor means it is an '*older workforce*' (Serena, 21:467). Additionally, all participants were from the same county and only one manager was from a different county. Thus, the homogeneity of the participants and the small sample size are recognised as limitations of this study.

By the end of October 2009 it was clear I was not going to meet my original targets for recruitment and my supervisor expressed concern about meeting the sample size requirements of the Doctorate in Clinical Psychology (DClinPsy). Supervision was important at this time as I felt despondent about the apparent lack of interest in my research and the positive approach and encouragement of my supervisor were crucial. However, as a qualitative piece of research, I also felt the emphasis had never been on



producing objective generalisable findings but was more about subjective accounts and depth of meaning.

The options discussed included recruiting from other areas and collecting more data through questionnaires developed from one or two focus groups, but both were discarded due to time constraints. We decided that collecting data from managers would provide another angle on the data collected in the groups and enrich understanding of the data from HVs. Focus groups were considered likely to be problematic with managers for three reasons. Firstly, only four managers were to be invited to participate, so even if all agreed and attended, the group would be quite small. Secondly, the managers were spread across a large geographical area and therefore two or more of them would have had to travel a substantial distance to attend, thus reducing the likelihood of them attending. Thirdly, discussions highlighted that finding a time when all managers would be able to attend for two hours plus travel time would likely prove very difficult. Accordingly, I submitted a substantial amendment to ethics proposing that I conduct individual interviews with people who held some direct managerial responsibility for health visitors.

#### *1.4.2 Organising the focus groups.*

Eventually I was able to start the process of setting up focus groups. As expected this was logistically difficult due to participants working part-time, geographical locations and full diaries. As such the first groups took place just before Christmas 2009, with smaller numbers invited than initially planned. However, attendance was very good, and only one participant dropped out due to work pressures.

Unfortunately, due to delays organising the groups, the person who had initially agreed to be note-taker was no longer available so I was faced with a very short space of

time in which to find someone else. Thankfully my supervisor was able to recommend someone but there was very little time for her to become acquainted with the research and, in particular, with the focus group method. As such the notes provided less information on participant interactions and group dynamics than I had hoped for and this had a knock-on effect on the analysis. However, post-group discussions between the note-taker and myself attenuated this somewhat as we were able to record general impressions of group dynamics and discussion topics.

#### *1.4.3 Conducting the focus groups.*

The morning of the first group I felt nervous and under pressure to get every group 'right' due to the small number of participants. In addition the weekend had been very cold and snowy and I was concerned that people would not make it. However, everyone arrived safely and the group got underway. During the discussions prior to the group starting one participant revealed that she had come along without knowing anything about the research because her manager had requested that someone volunteer to take part. This revelation further highlighted faults in the recruitment process. I ensured the participant knew she did not need to take part and could leave at any time but having read the information sheet and asked me a couple of questions she assured me she was happy to participate.

During the group I referred to the topic guide but was also guided by the principle proposed by Knodel (1993) that *'the moderator will mostly be improvising comments and questions within the framework set by the guidelines. By keeping the questions open-ended, the moderator can stimulate trains of thought in the participants that were not*

*anticipated*' (p.36). I feel this approach also allowed *me* to follow up themes raised by the HVs in discussions that *I* had not anticipated.

At the end of the first group I finally had some data to work with and the focus group had functioned better than I had anticipated it would; participants had asked questions of each other and challenged some of the ideas put forward. I was pleased participants had apparently struggled with the concept of postnatal PTSD as it felt like this 'justified' my research. However, I also found myself thinking that my ideas about how necessary it was for HVs to be able to identify postnatal trauma had been quite rigid and perhaps it was not always necessary.

The second group was the following day, allowing very little time for amendments to the procedure to be made. Feedback from participants (both on the forms and verbally at the end of the group) was positive but there was no time for me to listen in detail to the group and read the notes. Had I been able to do this I may have chosen to request the note-taker to focus more on group dynamics, themes and participants' non-verbal communications. I might also have chosen to ask more questions that focused participants on the topic of trauma, as they often veered towards discussing things from the perspective of postnatal depression. The gap between the second and third groups allowed time for this reflection and these changes were implemented at the third group.

After the success of the first two groups the third proved more difficult. The first issue was that there had again been a lot of snow and the note-taker informed me shortly before the group that she was unhappy to drive because of it. I was faced with the dilemma of cancelling the group at very short notice or conducting it alone. As I had not heard from any participants to say they would not be coming I decided to go ahead with

the group. This decision was also informed by my anxiety about how long it would be until another group could be arranged and whether this would cause issues to participants who had been waiting a long time already to take part.

The second issue was that the first health visitor to arrive brought a student with her and said that she would not participate but was with her today so was going to sit in. Again I was faced with a dilemma; I was aware that her presence could influence the participation of other health visitors and that she was not bound by any confidentiality agreement. However, if I said that she needed to wait outside (which the health visitor clearly was not expecting) this could create a very difficult situation and potentially lead to bad feeling between myself and the health visitor. I decided to ask all the other participants for their views on her presence; everyone agreed that it would not affect their participation as they were used to having students around. I also requested that the student complete the statement of confidentiality used for the note-takers and ensured the participants were aware she had done this. While this seemed to me at the time to be acceptable, on the drive home I became increasingly anxious about my decision. Once again supervision proved very important and the calm response of my supervisor was vital in allowing me to gain some perspective on the situation. Through this we weighed up the relative ethical problems related to using the group as opposed to discarding it. On balance, it was decided that it would be less ethical to discard data that the participants (who were busy professionals) had given up their time to provide, presumably because they believed it to be of importance. In addition, the feedback forms (completed by two participants in this group) made no mention of them being unhappy with the student being present. As such the data was included in the analysis.

A final issue with the third group was that they seemed far more focused on postnatal depression than the other two groups had. I considered distributing the Postnatal PTSD Brief Information Sheets but I was concerned that this might be interpreted by the participants as a sign of my dissatisfaction with what they were saying and that this would influence their willingness to continue discussions. These concerns may have been partly due to my already existing anxiety about the presence of the student. As such I decided against distributing the information sheets during that group. On reviewing the transcript I found that significant portions of the discussion did centre on postnatal depression. However, there were also discussions regarding trauma and actually their relative comfort in talking about depression as opposed to trauma seemed to me to be data in itself. Had I gone on to conduct further groups I would have needed to identify a way to introduce the information sheets that I would be comfortable with.

#### *1.4.4 Conducting interviews.*

At the time of developing questions for the interview guide I had already transcribed much of the focus group data, during which I had identified some areas that I would like to explore further and this informed some of my questions on the guide. Again I consulted with my supervisors and made changes to the structure and wording of the questions in light of their advice.

During the first interview I became aware that I was straying from the ‘interview’ format (where I asked questions and she answered them) such that I was offering interpretations of her statements which drew on information I had gathered from the focus groups. I think this was partly because I had already started some early analysis of the focus groups so was thinking in a more analytical and interpretative way. Once aware

of this I tried to maintain a more question-and-answer approach in this and subsequent interviews.

The second interviewee seemed keen to participate; indeed she was quite talkative and it was sometimes difficult to keep on her track. It was very interesting to note that the interviewee expressed concern about sounding cynical and critical when talking about the role of economics. This reminded me again of the influence of numerous factors on what people will and will not say and that the data collected cannot be treated as if it accurately reflects stable beliefs and attitudes held by participants.

## 1.5 Discovery, Interpretation and Formulation

### *1.5.1 Transcription.*

Transcription is not a neutral process and, as the transcriber, I had to make numerous decisions not only about *what* to transcribe (e.g. pauses, intonation, participants' movements) but also how to interpret what I heard on the recordings and how to represent this on paper. Thus, transcribing the focus groups and interviews was considered to be the first stage of analysis, resulting in a representation of what was said during the focus groups and interviews. Decisions about what to transcribe were made on the basis of the aims and methods of the research, as well as being influenced by my epistemological, political and theoretical views (Roberts; 2004). The decisions that guided transcription for this study are described and justified in Appendix L. I think transcription is often seen as a chore in research but I found it hugely helpful to my later analysis; it helped me become more familiar with the data and I found myself reading the transcripts in the voice of the person who was speaking, which I think helped me remain grounded in what the person was saying rather than in my own interpretation of it.

After transcribing the focus groups I was concerned participants had spoken a lot about postnatal depression and there would not be sufficient data regarding the trauma. The title of the study on the information sheet for HVs referred to postnatal mental health, rather than postnatal trauma, in order to prevent priming participants. On reflection this may have primed them instead to talk about postnatal depression and when they got to the group it was difficult for them to move to another topic. The nature of focus groups meant that I had less control over the direction of the topic allowing participants to ‘stray’ more easily on to the topic of postnatal depression.

### *1.5.2 Analysis.*

I had not used template analysis before but found it logical and enjoyed using it to break down the information and build it back up again into a coherent and useful form. As King (2004) notes, I sometimes struggled to balance between remaining open to the data whilst also focusing on the data which had most relevance to the research question. I found it particularly hard when participants talked about postnatal depression to decide whether what they said was also relevant to birth-related trauma or whether it could be put aside. I was also mindful of the advice that, ‘*Not all statements can be taken at face value*’ (p.43; Knodel; 1993) and that interpretation of people’s statements can be helped by examining them ‘*within the context of the broader discussion and in light of information available from other sources based on different methodologies*’ (ibid.), in this case the interviews and background questionnaires.

A further difficulty lay in the timing of different parts of the analysis. I had decided to code all focus group transcripts first, then the interview ones but as I had already started to construct the focus group template in my mind, it was hard not to see

the interview data in light of this and to remain open to it. However, through the use of the reflective diary I tried to ensure I considered statements from a number of view points and then selected the one I felt best reflected the participant's original intent.

### *1.5.3 Putting it all on paper.*

I saw writing the results and discussion as another part of the analysis process (King; 2004). Again I found it difficult to know what to include and what could be left aside. I felt a keen sense of wanting to do justice to all the data participants had given and to use the interaction data but due to space constraints this was sidelined somewhat. I was guided during the write-up by the question '*Are these findings sufficiently authentic (...related to the way others construct their social worlds) that I may trust myself in acting on their implications?*' (p.205; Guba & Lincoln; 2005) and as such always tried to ensure that whatever interpretation I made or conclusion I drew was based on something in the data. The process of sending a summary of my interpretations to participants for their feedback was crucial as it forced me to ensure I felt comfortable that I could justify everything I sent them. I was also keen to use language that I felt reflected that used by participants but this raised a particular issue regarding how to refer to the women participants worked with. Commonly, participants used 'mum', although through discussions with supervisors I recognised this potentially conveyed connotations about the birth experience being a 'warm and happy' one. As such this might reinforce ideas around birth that might make it more difficult for women to admit that their experience was not in line with their expectations, nor with what wider society might expect.



#### *1.5.4 The issue of diagnosis.*

There is a prominent difference between the literature review and research report in terms of my use of and attitudes towards the ‘diagnosis’ of postnatal PTSD. My initial explorations of birth trauma were very much from the research perspective, which tended to use diagnostic criteria as inclusion criteria when determining aspects such as risk factors and rates of occurrence. As such when writing my literature review it seemed more congruent to refer to diagnostic criteria and this happened to overlap with, and therefore influence, the planning and early stages of much of the research. However, as I progressed with the research, from meetings with my supervisors through to the focus groups, I became more uneasy and dissatisfied with the application of these criteria to clinical situations. Primarily I was concerned that a diagnostic approach to providing treatment would exclude significant numbers of women who might experience considerable distress as a result of only one or two symptoms. At the same time, my ongoing clinical training moved from more individualistic approaches (such as cognitive behavioural therapy) that can fit well with a diagnostic stance, to approaches that consider the wider influences on a person (such as community psychology) and tend to emphasise social constructionism; I found myself very much drawn to the latter over the former. Eventually I settled for ‘PTS symptoms’ as my preferred term.

Considering the potential impact of this on the findings and conclusions of this research it is likely that my conclusions were less vehement as I moved to the position that diagnosis was not vital, whereas recognition of distress was. Had I maintained a strong belief in the validity of diagnosis then my conclusions may have been more

strongly put as it was clear that a diagnostic label was something the HVs were not comfortable with.

If I was to conduct this research again it is likely that I would take more time during focus groups to explore participants' perspectives on the symptoms and distress further. For example, which symptoms HVs considered to take priority over others, on what basis are these priorities decided and what they considered to be the potential impact of specific symptoms on the mother and family unit. It is likely that I would also use terms such as 'birth trauma' or 'trauma-related distress' in preference to 'post-traumatic stress disorder' to avoid putting unnecessary emphasis on the diagnosis aspect. It is possible that this would free up some of the time that participants spent discussing what 'post-traumatic stress disorder' meant in the context of birth and allow fuller discussion of their experiences of working with women who had experienced birth as traumatic.

## 1.6 Reflexivity

Reflexivity refers to '*the process of reflecting critically on the self as researcher, the "human as instrument"*' (p.210; Guba & Lincoln; 2005). Through the use of a reflective diary, in which I documented my thoughts, impressions, feelings and decisions, I attempted to reflect on how I influenced the interpretation and presentation of data. I was aware that I had no first hand experience of giving birth and considered how my views of birth and motherhood had been influenced by societal values and media portrayals. Through the focus groups/interviews and discussions with supervisors and friends I became more aware of the conflicts inherent in these and how these might impact on both mothers and professionals supporting them. Secondly I was aware of my

training as a psychologist and the huge impact this had on my conceptualisations of trauma and how it should be managed. I felt my initial diagnostic stance to postnatal PTSD did not reflect the approach of health visitors, nor my usual approach to my clinical work. I began instead to see it more as a continuum and as such my ideas about how best to support women who experience a traumatic birth have changed.

### 1.7 Impact on Trainee

The third focus group was a huge learning curve for me as until then I had assumed that all the participants would behave as I had planned for and that I would gather up the data they willingly gave. I feel I am now more realistic about the unpredictability and uncertainty when conducting research with human participants. Additionally I am more aware of the difficulties of recruiting participants, particularly healthcare professionals, and have learned to plan for it to be harder than anticipated. I also learned the value of having a trusting relationship with a supervisor who is experienced in research.

The research project did not run to the projected time scale because of recruitment difficulties. Despite gaining an extension, it was not possible to make up for the six-month delay in data collection. While any research project has to be conducted within a timescale, the context of the DClinPsy also has implications for qualification and employment, which increase the pressures to complete it on time. I was aware of the potential for this pressure to lead me to feel paralysed and tried to keep in mind the tenets of the '*good-enough dissertation*' (Thomas; 2001).

Consonant with the ‘good-enough dissertation’ I see this research as my first explorations of the complexities of maternal mental health and I hope to explore some of the questions raised by it in future research.

## 2. References

Department of Health (2009) *Healthy Child Programme: Pregnancy and the first five years of life*.

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_107563](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107563) (accessed 21st January 2010)

Guba, E.G. & Lincoln, Y.S. (2005). Paradigmatic controversies, contradictions, and emerging influences. In Denzin, N.K. & Lincoln, Y.S. (Eds) *The Sage Handbook of Qualitative Research*. 3<sup>rd</sup> Ed (p191-215). Thousand Oaks, California: Sage.

King, N. (2004). Using templates in the thematic analysis of text. In Cassell, C & Symon, G. (Eds) *Essential Guide to Qualitative Methods in Organizational Research* (p256-270). London, UK: Sage.

Knodel, J. (1993). The design and analysis of focus group studies: A practical approach. In Morgan, D.L. (Ed) *Successful Focus Groups: Advancing the state of the art* (p35-50). Newbury Park, California: Sage.

Madill, A., Jordan, A. & Shirley, C. (2000). Objectivity and reliability in qualitative analysis: Realist, contextualist and radical constructionist epistemologies. *British Journal of Psychology*, 91, 1-20.

National Institute for Clinical Excellence (2007). Antenatal and postnatal mental health: Clinical management and service guidance. [www.nice.org.uk/CG045](http://www.nice.org.uk/CG045)

Roberts, C. (2004). *Qualitative Data Analysis: Transcribing Spoken Discourse*. FDTL Data Project. [www.kcl.ac.uk/schools/sspp/education/research/projects/dataqual.html](http://www.kcl.ac.uk/schools/sspp/education/research/projects/dataqual.html) (accessed 6<sup>th</sup> January 2010).

Thomas, S.P. (2001). The good-enough dissertation: A modest proposal. *Nursing Outlook*, 49, 211-212.

## **Appendices**