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Title: What are the characteristics of perinatal events perceived to be traumatic by midwives?

Article Type: Original Research

Keywords: Midwives; Indirect trauma; Maternity workforce; Posttraumatic stress

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Abstract: Objective: There is potential for midwives to indirectly experience events whilst providing clinical care that fulfil criteria for trauma. This research aimed to investigate the characteristics of events perceived as traumatic by UK midwives. Methods: As part of a postal questionnaire survey conducted between December 2011 and April 2012, midwives (n= 421) who had witnessed and/or listened to an account of an event and perceived this as traumatic for themselves provided a written description of their experience. A traumatic perinatal event was defined as occurring during labour or shortly after birth where the midwife perceived the mother or her infant to be at risk, and they (the midwife) had experienced fear, helplessness or horror in response. Descriptions of events were analysed using thematic analysis. Witnessed (W; n= 299) and listened to (H; n= 383) events were analysed separately and collated to identify common and distinct themes across both types of exposure. Findings: Six themes were identified, each with subthemes. Five themes were identified in both witnessed and listened to accounts and one was salient to witnessed accounts only. Themes indicated that events were characterised as severe, unexpected and complex. They involved aspects relating to the organisational context; typically limited or delayed access to resources or personnel. There were aspects relating to parents, such as having an existing relationship with the parents, and negative perceptions of the conduct of colleagues. Traumatic events had a common theme of generating feelings of responsibility and blame Finally for witnessed events those that were perceived as traumatic sometimes held personal salience, so resonated in some way with the midwife's own life experience Key conclusions: Midwives are exposed to events as part of their work that they may find traumatic. Understanding the characteristics of the events that may trigger this perception may facilitate prevention of any associated distress and inform the development of supportive interventions.

Reviewer #1:

Thank you for the opportunity to review the paper "What are the characteristics of perinatal events perceived to be traumatic by midwives?"

This is an important and relevant topic for midwives.

The paper is well written.

I have some suggestions for improvement.

My major concern is whether in fact this is thematic analysis. With so many statements analysed and each only being 3 or 4 lines each and the type of headings and very short quotes that are more reporting than describing or discussing I wonder if in fact this is more content analysis than thematic analysis. I think more thought needs to be given to this.

There are a number of similarities between thematic and content analysis, however we are clear that thematic analytic process was used in that the coding units for content analysis tend to occur at a micro level (e.g., words, very short statements), whereas larger amounts of texts can be included in one code for thematic analysis (Braun & Clark, 2006). We understand that some of our choices of illustrative quotes may have been misleading in this respect in appearing quite short. However in keeping with thematic analytic process there were longer sentences that were incorporated into one code throughout the analysis. In addition, the overall analysis involved use of both manifest and latent (or semantic) content, which is characteristic of thematic analysis (Vaismoradi, Turunen & Bondas, 2013). The presentation of findings has been revised to better reflect the above issue and there is now a larger amount of context and interpretation included for each theme.

- *Braun V, Clarke V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2): 77- 101.*
- *Vaismoradi M, Turunen H, Bondas T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. Nursing and Health Sciences, 15: 398- 405*

Can you also explain more in the methods about the criterion A you used for PTSD as this is what you use to obtain your final sample. No detail is given.

Detail about Criterion A has now been included; please see page 5 lines 18- 20.

In the conclusion I would not say 'this manuscript' but 'this paper or study'.

This has now been changed to read 'study' (page 20, line 3).

Reviewer #2: Review YMIDW-D-15-00462

Thank you for submitting this interesting article on a topic that requires exploring. Please see the comments below.

General comments:

- This is a very interesting topic, and the development of PTSD in midwives is concerning and requires an in-depth exploration and discussion. I find the presentation of the findings - by listing themes and then example quotes without any context - provides less impact then if the quotes were explored and presented with explanatory text. There are areas within the discussion that would provide context for

the findings and I feel that this would emphasise the intensity of the quotes that the midwives have shared. I suggest therefore that the findings are rewritten.

- *In response to this suggestion, we have revised the findings and discussion sections accordingly, including more context alongside the presentation of each theme and amending the discussion section to prevent repetition.*

- Throughout the article there is reference to both the abbreviations PTSD and PTS. PTS is not clarified in full prior to the use of the abbreviation to clarify if this is a separate item of referral or a typographic error (for example page 3). Please clarify in the text.
  - *We apologise for this oversight. Expansion of this abbreviation has now been included (page 4, line 3).*

Abstract

- The first sentence requires elaborating - is this events that midwives experience within the clinical setting?
  - *This has now been changed to read 'whilst providing clinical care' (page 1, line 2).*
- Clearly stating an aim would lead the reader to understand the context of the study.
  - *A statement of the aim for the study has now been included (page 1, lines 2-3).*
- The themes should be clearly stated in the abstract, it is unclear if the themes are listed and what they are. In addition, there is no mention of the subthemes that occur within the themes.
  - *The themes are now numbered in the abstract to improve clarity, in addition to reference to the identification of subthemes (page 1, lines 15- 22).*
- The sentence starting with "Feeling of responsibility…." Requires rewording as it is a little unclear. Particularly, increased difficulty in relation to what? Processing the event?
  - *This sentence has been amended to improve clarity, that these were elements associated with events that were perceived as traumatic (page 1, lines 21-22).*

Background

- Second paragraph: The sentence beginning with "Being unable to provide the care…" requires rewording. Are the midwives feeling that they are unable to provide clinical care? Psychological support? In addition within this sentence it concludes with "…in increasing difficulty for midwives.". Please clarify difficulty for what.
  - *This has been amended to reflect that these papers reported instances where midwives were unable to provide the quality of maternity care they deemed necessary for women as particularly difficult (page 3, lines 6-9).*

Methods

- Sample and recruitment process:
  - Due to blinding of author I am unable to view the detailed procedure for sampling and the postal questionnaire and this information is not provided.
    - Due to the guidelines for the blinding of manuscripts submitted for peer review, we removed the references for our earlier work. Please find below an extract from our previous paper, where the procedure for sampling and the postal questionnaire is provided. We will of course be happy to provide full references should the editors indicate this as a preference.

        - *“Participants were qualified midwives currently employed in the United Kingdom. Experience of a traumatic perinatal event was defined using Criterion A of the DSM-IV-TR (APA, 2000); that the midwife witnessed or listened to an account of an event where they perceived the mother and/or her child to be at risk of serious injury or death and where they (the midwife) experienced a sense of fear, helplessness or horror. Postal surveys were distributed to 2800 midwives, randomly selected from the Royal College of Midwives’ (RCM) membership database between December 2011 and April 2012. The RCM is the UK’s largest trade union and professional organisation for midwives and the majority of midwives within the UK are members. At the time of conducting the study the approximate number of members, as estimated by an RCM representative, was 30,000.”*
    - Demographic characteristics - insert references to Tables 1 and 2 where appropriate in this paragraph.
        - *Reference to Table one (additional demographic information) is provided on page 7 (line 3). Reference to Table two is provided at the end of the next paragraph in relation to the themes and subthemes identified through this analysis (page 7, line 16).*
- Process of analysis:
    - Please clarify if a coding tool was used to assist with this process, for example Nvivo, or if all surveys were coded by hand.
        - *Coding was completed by hand and this detail has been inserted into the text (page 5, line 19).*
    - Please reference a point for more information on Cohen's Kappa.
        - *Reference to Cohen’s Kappa has been inserted (page 6, line 5).*

Findings

- First sentence, second paragraph. Please clarify that the themes emerged from both witnessed and heard events.
    - *This has been inserted (page 6, line 7).*
- Please clearly state that each themes has a subtheme/s. This is not apparent here.
    - *Presence and number of subthemes for each theme has been inserted (page 7 lines 7-12).*
- See comments above in "general comments" regarding the presentation of the quotes from the surveys.
- Under theme 3. Aspects relating to relationship with parents
    - Subtheme ii. The use of the term "bad" seems to minimise the quote that is presented where the midwife is discussing the demise of a woman and child.
        - *This has been amended to ‘devastating and difficult’ (page 10 lines 8 and 19, Table 2).*
    - Subtheme iv. The title of this subtheme requires reconsideration. The quotes that are used to support this subtheme are quite broad and almost appear unrelated.
        - *Additional information and description has been included (page 9, lines 18-20) to improve the clarity of this theme.*
- The final category (page 9) for witness accounts. Please include a description of personal salience to expand on and provide context for this subtheme
    - *The description for this subtheme has been expanded in relation to the quote provided (page 13, lines 12-14 and 19- 21).*

Discussion

- The discussion is written as a combination of findings and discussion. An example of this is page 15, first paragraph: The section starting with "Another theme identified…." Ending with "deviate from the desired standard of care" would be more appropriate within the findings section to provide context to the related theme/subtheme and quotes. Therefore this requires revision with the findings clearly outlined under findings with quotes, and the discussion strengthened and directly related to the findings.
    - *In response to this and the suggestion about providing greater context in the results as stated earlier, the findings and discussion sections have been revised to increase the amount of description presented in the findings section and the discussion section clearly as consideration of those findings.*

- Under heading "event characteristics": There are many publications on women's experience of birth related trauma, please include additional references.
    - *Additional references have been inserted (page 15, lines 7-8).*

- Under heading "aspects relating to parents": This discussion point would be more clearly linked to the findings if findings are presented within context.
    - *Additional description has been inserted into the findings section for this theme, in order to improve the link between findings in the present study and those reported by the cited studies.*

- Page 15 second paragraph. The sentence commencing with "Limited or absent organisational support….". It would be beneficial to clarify for the reader if it is the midwife or nurse themselves experiencing a miscarriage, stillbirth and neonatal loss, or a woman they are caring for. While the meaning is implied, it is unclear, particularly as personal salience is a subtheme within the paper and seems to allude to this meaning.
    - *Additional detail has been inserted to clarify that it was in relation to women receiving care who experienced neonatal loss, miscarriage or stillbirth and not the nurse, midwife or obstetrician (page 16, lines 12-13).*

- Page 16. This paragraph requires restructuring. From the sentence "investigative procedures…" the structure of the paragraph is fragmented.
    - *This paragraph has been revised to improve clarity (page 17, paragraph 1).*

- Page 17, strengths and limitations. A comment - As recognised by the author the limited response space may have impacted on the description shared by the midwives and therefore the depth of insight. It is unfortunate that individual interviews with some of the participants were not able to be conducted to provide a greater exploration into the impact of witnessing a traumatic event on midwives.
    - *The purpose of the current study was specifically just to identify commonalities in the nature of events perceived as traumatic by a large number of midwives, independent of the nature of any associated impact this had on their personal or professional lives. As described in the methods (design) section, a subsample of respondents from the questionnaire survey were interviewed about their experiences of traumatic perinatal events, to provide an in-depth insight into the impact of experiencing a traumatic perinatal event with a small number of midwives with high or low levels of resulting distress respectively. However in contrast this paper provides a large sample analysis of the commonalities within events that were experienced in this way. Findings from the aforementioned study are*

published, but due to blinding the reference has not been included. We are happy to provide the reference with permission from the editorial office.

Title Page (including author details and affiliations)

Title: What are the characteristics of perinatal events perceived to be traumatic by midwives?

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HIGHLIGHTS

- Midwives described work-related perinatal events they had perceived as traumatic
- Events experienced as traumatic were unexpected, severe and involved multiple complications
- Difficulty accessing support/resources and other contextual aspects increased difficulty
- Post event factors (investigations, blame) were implicated in midwives' trauma perception
- Awareness that midwives experience trauma through their work is required

*Manuscript (without author details, affiliations and acknowledgments)
Click here to view linked References

1 ABSTRACT (312). **Objective:** There is potential for midwives to indirectly
2 experience events whilst providing clinical care that fulfil criteria for trauma. This
3 research aimed to investigate the characteristics of events perceived as traumatic by
4 UK midwives. **Methods:** As part of a postal questionnaire survey conducted between
5 December 2011 and April 2012, midwives (n= 421) who had witnessed and/or
6 listened to an account of an event and perceived this as traumatic for themselves
7 provided a written description of their experience. A traumatic perinatal event was
8 defined as occurring during labour or shortly after birth where the midwife perceived
9 the mother or her infant to be at risk, and they (the midwife) had experienced fear,
10 helplessness or horror in response. Descriptions of events were analysed using
11 thematic analysis. Witnessed (W; n= 299) and listened to (H; n= 383) events were
12 analysed separately and collated to identify common and distinct themes across both
13 types of exposure. **Findings:** Six themes were identified, each with subthemes. Five
14 themes were identified in both witnessed and listened to accounts and one was
15 salient to witnessed accounts only. Themes indicated that *events were characterised*
16 *as severe, unexpected and complex*. They involved aspects relating to the
17 *organisational context*; typically limited or delayed access to resources or personnel.
18 There were *aspects relating to parents*, such as having an existing relationship with
19 the parents, and negative perceptions of the *conduct of colleagues*. Traumatic
20 events had a common theme of generating feelings of *responsibility and blame*
21 Finally for witnessed events those that were perceived as traumatic sometimes held
22 *personal salience*, so resonated in some way with the midwife's own life experience
23 **Key conclusions:** Midwives are exposed to events as part of their work that they
24 may find traumatic. Understanding the characteristics of the events that may trigger

1 this perception may facilitate prevention of any associated distress and inform the
2 development of supportive interventions.
3
4 KEYWORDS: Midwives, indirect trauma, maternity workforce, posttraumatic stress
5
6 MAIN TEXT (4099/ 5000)

7 **Introduction**

8 In the course of either their work or providing clinical care midwives may encounter
9 events at work that they perceive as traumatic, either by witnessing an event as it
10 occurs during or soon after birth, or by listening to an account of an event as it is
11 recounted to them by a woman in their care. Events where the mother or her infant
12 are considered to be at risk of serious injury or death, and where the midwife
13 experiences fear, helplessness or horror in responses, have the potential to be
14 perceived as traumatic (APA, 2010). Exposure of this nature has been associated
15 with the development of posttraumatic stress disorder (PTSD; APA, 2013). PTSD
16 comprises of distressing and involuntary recollections (e.g., 'flashbacks') of an event,
17 coupled with the avoidance of reminders, a heightened sense of arousal and a more
18 negative emotional state. As PTSD can have a profound, negative impact on
19 personal wellbeing, it is important to understand the nature of events that may lead
20 to this.
21
22 Knowledge of the types of obstetric events most frequently reported as traumatic by
23 staff is limited but include fetal demise or neonatal death, shoulder dystocia,
24 maternal death and infant resuscitation (Beck, 2013; Beck & Gable, 2012; Beck,
25 LoGiudice & Gable, 2015). Additional contextual aspects have also been identified

as contributing to a perception of trauma. Events where midwives were unable to locate a physician to perform a caesarean section (Beck, LoGiudice & Gable, 2015), or where the care provided by another professional was perceived as overly forceful (Beck & Gable, 2012; Beck, LoGiudice & Gable, 2015) were reported as traumatic, contributing to feelings of helplessness. Fewer years of professional experience has also been implicated (Beck & Gable, 2012). Being unable to provide the type of maternity care deemed necessary for women, or where midwives disagreed with the clinical decision making of other members of staff, are also implicated in increasing emotional difficulty for midwives (Rice & Warland, 2013; Wallbank & Robertson, 2013). Finally, awareness that the mother was also in distress, or that they too perceived the birth as traumatic, has also been cited as contributing to midwives' negative experiences (Beck & Gable, 2012; Rice & Warland, 2013). However to date the focus has been on the specific obstetric event, rather than identifying thematic commonalities or common features of events experienced as traumatic.

[Author information omitted for blind review] conducted the first large-scale survey of UK midwives' experiences of work-related trauma. Surveys were distributed to a random sample of midwives (n = 2800), registered with the Royal College of Midwives (RCM). Of the 464 respondents (16%), 421 had experienced a traumatic perinatal event. One third of those with trauma experience reported symptoms of PTSD commensurate with a clinical diagnosis. Conservative estimations drawn from these findings indicated that a minimum of 1 in 6 midwives experience trauma whilst providing care to women, and that a minimum of 1 in 20 midwives were experiencing symptoms of PTSD commensurate with a clinical diagnosis.

1 In-depth interviews with a purposive sample of midwives from the [omitted for blind
2 review] survey provided a comparative analysis of experiences between those with
3 high or low posttraumatic stress (PTS) symptoms and impairment [omitted for blind
4 review]. Findings indicated that the perceived impact of trauma experience and
5 implications for their personal and professional lives differed between high and low
6 distress group. Midwives with high distress were more likely to report feeling
7 personally upset by their experience, and for the event to have held adverse
8 implications for aspects of both their personal and professional life.
9
10 Despite acknowledgement of the potential for midwives and other maternity
11 professionals to develop PTS symptoms in response to work experiences, there is
12 little research specifically investigating what sort of events midwives themselves find
13 traumatic (Sheen *et al.* 2014). For purposes of generalisability there is a need to
14 specifically consider the large-scale, questionnaire-based descriptions identifying the
15 nature of events that pose difficulty as this will enable detailed exploration of what
16 may influence perception of trauma. Through this, preventative or supportive
17 strategies can be developed on an informed basis.
18
19 **Methods**
20
21 *Aim*
22 To investigate the characteristics of events perceived as traumatic by UK midwives.
23
24 *Ethical Approval*

1 Ethical approval was obtained from the Department of Psychology (University of *X*)
2 in May 2011.The research was reviewed and approved as suitable by the Royal
3 College of Midwives' Education and Research Committee.
4
5 *Design*
6 Quantitative data from the postal questionnaire survey regarding sample
7 characteristics and psychological impacts after trauma experience has been reported
8 [omitted for blind review]. Information from subsequent in-depth interviews with a
9 smaller subsample of respondents from the questionnaire survey comparing the
10 experience of midwives with high and low resulting distress has been reported
11 elsewhere [omitted for blind review]. This manuscript presents analysis of written
12 event descriptions provided by midwives from this postal questionnaire survey.
13
14 *Sample and recruitment process*
15 Detailed procedure for sampling and postal questionnaire distribution is provided in
16 [*omitted for blind review]*. The final sample included 421 midwives who had
17 experienced at least one traumatic perinatal event corresponding to the DSM-IV
18 (APA, 2000) criterion A for PTSD; where the midwife perceived the mother or her
19 child to be at risk of serious injury or death, and where they (the midwife)
20 experienced fear, helplessness or horror in response. As part of the questionnaire,
21 demographic characteristics (age, gender, education) and professional experience
22 variables (year's qualified, professional designation and current location of work)
23 were collected and midwives provided a short written description of a traumatic
24 perinatal event they had experienced. These descriptions (3-4 lines) described a

perinatal event that had either been witnessed, or had been recounted to them by a woman in their care ('listened to').

Process of analysis

Thematic analysis was used to analyse the descriptions of perinatal events perceived as traumatic (Braun & Clarke 2006). The researcher (*X*) read through each event to familiarise herself with content. Open coding was conducted by hand for all data and codes discussed (in reference to extracts from the data) within the supervisory team (*X, X*). Through discussion and examination of original data, codes were collapsed where appropriate and organised into themes. Themes were reviewed and organised in terms of major overarching themes and minor subthemes. Discomfirmatory evidence was sought in reference to the devised codes and, where identified, retained and presented within the results. Uncertainties regarding categorisation were resolved through discussion within the supervisory team. Twenty percent of extracts, stratified for each code, were randomly selected for second coding by a Master's level student with a Psychology background, who was provided with guidance about perinatal events and descriptions of categories. Cohen's Kappa (Cohen, 1960) for agreement between category coding was 0.76, indicative of good inter-rater reliability.

Findings

Descriptions of 399 witnessed and 283 listened to events were provided by midwives. Midwives were aged between 22 and 68 years (M= 45.04, SD= 9.85) and had qualified as a midwife between 6 months and 44 years prior to completing the survey (M= 17.28, SD= 10.48). All but one of the midwives were female (n=420,

1 99.8%), and the majority (n= 395, 93.8%) reported that they were currently working
2 in clinical practice. Additional categorical demographic and work-related details of
3 midwives are provided in Table 1.
4
5 [TABLE 1 ABOUT HERE]
6
7 Six main themes emerged, each with subthemes: (i) event *characteristics* (5
8 subthemes)*; (ii) organisational context* (2 subthemes)*; (ii) aspects relating to parents*
9 (5 subthemes)*; (iv) perceived conduct of colleagues* (3 subthemes) *and (v) the*
10 *perception of blame and culpability* (2 subthemes)*.* Themes i-v were present in both
11 witnessed and heard events. The sixth theme was distinctive to the witnessed
12 accounts only and related to *the personal salience of the event* (3 subthemes) for the
13 midwife. Each category is presented with the common subthemes across witnessed
14 and heard first (indicated by 'W & H'), followed by any unique aspects identified
15 exclusively within witnessed ('W only') or heard ('H only') events. An overview of
16 themes is presented in Table 2.
17
18 [TABLE 2 ABOUT HERE]
19
20 1. Event characteristics
21 There was a distinct profile to the nature of events perceived as traumatic,
22 regardless of the way in which it was experienced, and all five of the identified
23 subthemes were present in witnessed and heard accounts. Events were described
24 as (i) *unexpected and sudden*, (ii) highly *severe* in their nature, (iii) involving *multiple*

complications, (iv) *difficult to control*, and (v) sometimes, but not always, involving *adverse or enduring implications*.

(i) Unexpected and sudden

A sudden IUD [intrauterine death] whilst caring for a woman on labour ward. [ID 414 W]

(ii) Highly severe

Severe PPH [postpartum haemorrhage] - hearing her blood dripping on the floor feeling of dying/fear. [ID 73 H]

(iii) Multiple complications

There were 3 obstetric emergencies with the same woman, same shift. 1) Shoulder dystocia 2) maternal collapse + haemorrhage 3) further haemorrhage. [ID312 W]

(iv) Difficult to control

The forceps delivery of baby boy, the horror of the delivery, the futile attempt at resuscitation by myself and paeds [paediatricians], and his death. [ID 257 W]

(v) Sometimes, but not always, involving adverse or enduring implications

Suboptimal CTG [cardiotocography]. Care by myself. Baby born in very poor situation - on-going lifelong disability. [ID 342 W]

> *Severe shoulder dystocia in isolated GP unit without resident medical staff - required intensive resuscitation - no heart rate until 3 mins and was transferred to consultant unit 20 miles away - good recovery and no long-term effects. [ID 22 W]*

2. Organisational context

Midwives reported events where access to support or additional personnel contributed to their perception of trauma. Whilst this was sometimes attributed to the physical location of the event, or a busy environment meaning that staff were elsewhere when needed, it highlights a degree of helplessness in midwives' experiences. There were two subthemes within this category: events where there was (i) *difficulty accessing resources or personnel* required (W & H) or (ii) where *mothers were left alone* during the event (H only).

(i) *Difficult accessing resources or personnel*

> *Ante partum haemorrhage at 42 weeks, transferred her to theatre for LSCS, was unable to get an anaesthetist for 30 minutes. [ID 203 W]*

> *Massive PPH at home - woman on own with baby - felt her life ebbing away whilst waiting for ambulance. [ID 372 H]*

(ii) The mother was alone

> *Maternal collapse due to PPH following delivery. Woman wasn't 'seen to' for 5 minutes unable to reach call bell and on own in room. [ID 19 H]*

1
2 3. Aspects relating to the relationship with parents
3 Relationships with women and their partners were an additional aspect reported by
4 midwives, especially where a relationship had been established through prior care.
5 Four subthemes were identified, all relating to aspects of events experienced as
6 traumatic by midwives that related to their relationships or experiences of caring for
7 women and/or parents; (i) presence of *an existing relationship with parents* (W & H),
8 (ii) *supporting or delivering devastating and difficult news* (W & H), (iii) *difficulty*
9 *witnessing mother's distress* (H only), and (iv) *a difficult relationship with parents* (W
10 only). The latter subtheme involved aspects relating to a perception of threat from
11 parents, perception of a mother not following advice increasing difficulty during the
12 event, or difficulty establishing communication through a language barrier.
13
14 (i) Presence of an existing relationship with the mother/ parents
15 *Cared for a woman antenatally who days later subsequently died. I was*
16 *absent at this time but because I had known her I was sickened by the events.*
17 *[ID 245 H]*
18
19 (ii) Supporting or delivering devastating and difficult news
20 *Discussing the demise of mother and neonate to the partner and father. The*
21 *loss of your wife and child in the same day - and I am the midwife trying to*
22 *make sense of the event not only to myself but to a partner 'beyond distress.'*
23 *[ID 439 W]*
24
25 (iii) Difficulty witnessing a mother's distress

1 *A patient had a very traumatic birth and then had a shoulder dystocia, the*
2 *woman was very upset about the whole experience. [ID 386 H]*
3
4 (iv) *Difficult relationships with parents*
5 *Difficult caring for women and families who become unwelcoming. [ID 126 W]*
6
7 *A woman having a VBAC at home against medical advice who developed*
8 *tachycardia and refused to go into hospital as she considered herself to be at*
9 *low risk of uterine rupture. [ID 326 W]*
10
11 *Death of a baby at term in labour. Mother spoke no English which was very*
12 *stressful. [ID 245 W]*
13
14 4. Perceived conduct of colleagues
15 Another fourth theme related to midwives' relationships with and perceptions of the
16 conduct of their colleagues. Within this, three subthemes were identified, two of
17 which were common to both witnessed and heard accounts; the (i) perception of
18 *overly forceful interventions* performed by another practitioner, and (ii) the *perception*
19 *that the abilities of colleagues were limited or care was unsatisfactory* in relation to
20 the care provided. The third theme was identified only within witnessed accounts;
21 where (iii) the *midwife did not feel supported* by colleagues during the event (W
22 only). This highlights the essential nature of workplace support, and how an absence
23 of support from other colleagues can influence midwives' distress during an adverse
24 event.
25 (i) Perception of overly forceful interventions

Brutal mid cavity forceps delivery- obstetrician managed to pull bed across the floor of LW. [ID 410 W]

(ii) Perception that the abilities of colleagues were limited or care was unsatisfactory

A woman treated 'like a piece of meat' in the labour room. Disrespected, not listened to, nothing was explained. Blamed for needing a forceps delivery because wasn't pushing well enough! [ID 206 H]

(iii) Not feeling supported by other colleagues

I did a CTG on a high risk mum 15 years ago. There was excessive fetal movement and then a severe bradycardia. All theatres busy and MD on duty queried my findings. Baby died after 2 hours after EMCS [Emergency Caesarean Section]. [ID 236 W]

5. Aspects relating to blame and culpability

A further theme related to midwives' experiences of (i) *involvement in investigatory procedures* taking place, including both internal and professional procedures following the birthing episode. Midwives also reported aspects relating to (ii) *attribution of blame*, involving either self-blame, or perceiving that others (colleagues, family members) blamed them for what had happened. This finding emphasises how post-event factors contribute to midwives' perceptions of an adverse perinatal event.

(i) Involvement of investigatory procedures

1 *Locum GP implying care inadequate in hospital undermining patient's faith in*
2 *hospital and interfering with grief process - all totally uninformed - very large,*
3 *nasty, investigation. [ID 121, H]*
4
5 *(ii) Attribution of blame*
6 *When performing antenatal check at a lady's home and not being able to find a*
7 *fetal heart beat. On arrival to the hospital the scan revealed the baby had died.*
8 *The lady did not believe it and over the next few days blamed me for the loss [ID*
9 *446 W]*
10
11 6. Personal salience for the midwife
12 A final theme, identified only in witnessed accounts, highlighted that midwives'
13 perception of trauma could be influenced by their own personal experiences or
14 circumstances. This category includes three subthemes relating to the (i) *limited*
15 *experience in the profession*, (ii) perceptions of *responsibility during the event*, and
16 (iii) *personal salience*. Perceptions of responsibility in this context included events
17 where the midwife was the first person to identify a particular circumstance, or where
18 they were primarily responsible for the care of a woman at that time. Personal
19 salience included events where midwives could relate to what happened based on
20 their own personal experiences of childbearing or, as in the excerpt below, when
21 experiencing an event whilst they themselves were pregnant.
22
23 *(i)* Limited experience in the profession
24 *During 2nd shift as newly qualified midwife (night shift) - catastrophic PPH*
25 *[postpartum haemorrhage]. L/W [labour ward] coordinator berated me for not*

documenting events contemporaneously, (done in retrospect). Wrote resignation after that shift, it took my husband to point out it wasn't my fault. [ID 331 W]

(ii) Perceptions of responsibility during the event

Cord prolapse. I was midwife number one caring for woman and discovered prolapsed cord. [ID 101 W]

(iii) Personal salience

Looking after a colleague in labour diagnosed a 'cord prolapse' baby stillborn. I was heavily pregnant at time of incident. [ID 36 W]

Discussion

This is one of a series of three papers to report from a large-scale investigation of traumatic responses in UK midwives. All accounts provided by midwives in this analysis fulfilled the DSM-IV Criterion A for a traumatic event that could lead to PTSD (APA, 2010). Findings indicate that there were key aspects central to the event in addition to factors relating to the organisational context, mothers and partners, colleagues, and investigatory procedures and blame. These aspects are integrated within the whole perception of an experience as traumatic, regardless of any resulting psychological impact.

Event characteristics

Events occurred suddenly, were severe in their nature and sometimes involved multiple complications occurring in succession during one birthing episode. This

1 reflects trauma in other contexts (Brewin & Holmes, 2003); events that occur
2 suddenly are more likely to be perceived as traumatic, and could elicit PTSD, as they
3 are more difficult to process into existing memories and beliefs (Ehlers & Clark,
4 2000). A perceived loss of control which, in the context of the present study was
5 indicated by events where midwives felt unable to control what was happening, is a
6 strong predictor of trauma perception. This is indicated by findings both in relation to
7 women's experience of birth related trauma (Czarnocka & Slade, 2000; Grekin &
8 O'Hara, 2014; Harris & Ayers, 2012) and in the general trauma literature (Ehlers &
9 Clark, 2000).
10
11 *Organisational context*
12 Midwives' reports of difficulty accessing resourses or personnel during a traumatic
13 perinatal event reflect those from a survey of nurse-midwives, who also described
14 feelings of helplessness due to an inability to locate relevant staff during an adverse
15 event (Beck et al., 2015). Similar to perceptions of control, feelings of helplessness
16 are central to the perception of trauma (Ehlers & Clark, 2000). These findings
17 highlight the role of the overall organisational context as contributing to midwives'
18 difficulty.
19
20 *Aspects relating to relationships with parents*
21 Findings from our study, which emphasises relationships with recipients of care as a
22 potential vulnerability factor for midwives, resonates with work amongst midwives
23 and other similar maternity professionals in other settings (Beck & Gable, 2012; Rice
24 & Warland, 2013). Empathic engagement with women is an important determinant of
25 women's positive birth experiences (Moloney & Gair, 2015) and is recognised as an

1 essential aspect of compassionate maternity care (NHS, 2014). However building a
2 bond with a woman in receipt of care requires empathic engagement, which can
3 theoretically facilitate the internalisation of another individual's traumatic event
4 (Figley, 1996).
5
6 *Perceived conduct of colleagues*
7 A central feature of the midwifery role is to advocate for women to ensure that the
8 care provided is sensitive and safe. Responses included in this theme highlight the
9 potential for midwives to experience distress when they perceive the care provided
10 for women deviates from the desired quality of care. In a study by Wallbank and
11 Robertson (2013) perception of inadequate care predicted traumatic stress
12 responses in obstetricians and midwives after an experience of providing care for a
13 woman experiencing loss, miscarriage and neonatal death. Perception of overly
14 forceful interventions has also been reported as traumatic in previous studies with
15 nurse-midwives and labour and delivery nurses in America (Beck & Gable, 2012;
16 Beck et al., 2015), and findings from the present study confirm this as an aspect of
17 an experience that may contribute to UK midwives' difficulty.
18
19 Limited or absent organisational support was identified as an aspect increasing
20 difficulty in midwifery and nursing staff after experiencing miscarriage, stillbirth and
21 neonatal loss (Wallbank & Robertson, 2008). We know from in depth interviews with
22 a subsample of midwives from the present survey, that feeling isolated (physically or
23 psychologically) was reported by midwives with high levels of distress after a
24 traumatic perinatal experience (Sheen *et al.,* 2014). This finding highlights the

1 importance of a supportive working environment for midwives in the event of an
2 adverse birthing episode.
3
4 *Responsibility and blame*
5 The subtheme of midwives blaming themselves for the outcome of an event reflected
6 findings from Rice and Warland (2013) where Australian midwives described feelings
7 of responsibility, regret and guilt after an event they perceived as traumatic.
8 Investigatory procedures following an adverse perinatal event are necessary to
9 determine a cause (NMC, 2011) and can be instrumental for the improvement of
10 future care. However, present findings indicate that the experience of investigatory
11 procedures may further contribute to the perception of trauma after a difficult
12 perinatal event. At the upper end of the spectrum, where clinical negligence claims
13 may be investigated, involvement in litigation has been found to increase midwives'
14 tendency to practice defensively and reduce confidence in practice (Robertson &
15 Thomson, 2015), and can contribute to a perceived workplace 'blame culture'
16 (Robertson & Thomson, 2015).
17
18 *Midwives' personal salience*
19 A final theme, identified only in witnessed accounts, highlighted that midwives
20 reported events early in their midwifery career as difficult. A limited amount of
21 experience to draw on during a traumatic perinatal event could influence midwives'
22 perceived difficulty when an unexpected and unusually severe or complicated birth
23 occurs. This was also identified by Beck and Gable (2012) in their analysis of written
24 descriptions of events perceived as traumatic by US labour and delivery ward
25 nurses.

Furthermore, the perception of trauma was also influenced by midwives' personal circumstance (e.g., being pregnant at the time of the incident). Salience of an adverse event due to personal experience or circumstance is likely to increase the extent to which midwives identify with another woman's experience, which can contribute to difficulty (Figley, 1996). This finding indicates a requirement to acknowledge the personal experience of the midwife in identifying those potentially more vulnerable to trauma perception.

Strengths and Limitations

Midwifery respondents were similar in age and gender to midwives in the UK midwifery profession (DOH, 2010; NMC, 2008). Traumatic perinatal event exposure was operationalized using an adapted criterion from the DSM-IV-TR (APA 2000). Descriptions of traumatic perinatal events were limited in their length (3-4 lines); it is possible that encouraging longer accounts may provide a greater depth of insight into midwives' experiences. Time since event and completion of questionnaire was not ascertained, which may have led to some degree of bias in recall of events.

Implications for midwifery services

Unexpected, severe and complex events are not always avoidable in the maternity setting, but it is important that organisations recognise that these types of events may be perceived as difficult not only for women and their families, but for members of staff as well. Findings from the present study emphasise the importance of services and organisations acknowledging the potential for midwifery staff to perceive some work-related events as traumatic. Understanding the components of

1 events that are experienced as traumatic may also help midwives to understand and
2 monitor their own responses. Ways of achieving this require development and
3 testing for the pre and post registration midwifery workforce.
4
5 Findings also highlight that the organisational context and investigatory procedures,
6 for example surrounding Serious Adverse Events, may contribute to the perception
7 of trauma for midwives. Whilst internal or professional investigations are necessary
8 after an adverse event, it is important to ensure that these are conducted sensitively
9 to reduce any additional adverse impact upon the midwife involved.
10
11 Given the increasing pressure on UK maternity services from workforce pressures,
12 increasing birth rates and clinical case complexity (RCM, 2015), it is important to
13 support retention and wellbeing of the existing workforce. Strategies to prevent the
14 perception of trauma will provide one way of supporting retention of the existing
15 workforce, and will also hold beneficial implications for the support of staff to provide
16 safe, quality maternity care (National Maternity Review, 2016). Findings from this
17 survey add to an emerging evidence base that has international relevance for
18 maternity care professionals in other settings who may experience similar types of
19 traumatic perinatal events.
20
21 *Implications for research*
22 It is essential that methods to prepare midwives for, and to prevent the perception of,
23 trauma are developed and evaluated. Identification of effective methods to increase
24 awareness of trauma are required, in addition to the development of effective
25 supportive strategies for those who encounter an adverse event at work.

1

2 **Conclusion**

3 This study presents the analysis of a large number of traumatic perinatal event
4 descriptions provided by midwives as part of a postal questionnaire survey.
5 Perception of trauma was influenced by aspects intrinsic to the event (severe,
6 complex, unexpected) but also by aspects relating to parents, colleagues, personal
7 salience, organisational context, investigatory procedures and perceptions of blame.
8 Further work is required to develop approaches to preventing midwives from
9 experiencing elements of their work as traumatic.

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Table 1. Demographic and work-related characteristics of midwives

	N	%
Education		
Bachelor's/ RM/SCM	264	62.9
Diploma/ Cert.	104	24.6
Master's/ Doctorate	29	6.9
Marital Status		
Married/ Cohabiting	328	77.9
Single	50	11.9
Divorced	35	8.3
Employment		
NHS	397	94.3
University	7	1.7
Multiple	4	1.0
Private	3	.7
Other	10	2.3
NHS Band		
5	9	2.2
6	272	63.6
7	108	25.4
8a-d	16	5.2
Area of practice[a]		
Labour ward/ Intrapartum care	253	60.1
Community	146	34.7
Postnatal	128	30.4
Antenatal	132	31.4

Note. Total *n*= 421. [a]Concurrent areas of practice reported; % represents proportion of the total sample

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Table 2. Overview of themes and subthemes from the thematic analysis of event descriptions

	Witnessed accounts only	Both Witnessed and Heard accounts	Heard accounts only
1. Event characteristics		1.1. Unexpected Sudden presentation 1.2. Highly severe 1.3. Multiple complications 1.4. Unable or difficult to control 1.5. Negative, on-going implication*	
2. Organisational Context		2.1. Access to resources or personnel limited or delayed	2.2. The mother was left alone
3. Aspects relating to parents	3.3. A difficult relationship with parents	3.1. Having an existing relationship with parents 3.2. Supporting parents, delivering devastating and difficult news	3.4. Acknowledgement of the mother's experience 3.5. Witnessing parents' distress
4. Conduct of colleagues	4.3. Midwife not feel supported by other colleagues	4.1. Overly forceful interventions 4.2. Perception that the abilities of colleagues were limited or unsatisfactory	
5. Responsibility and Blame		5.1. Involvement of professional investigation 5.2. Attribution of blame	
6. Personal salience *(Witnessed events only)*	6.1. Limited professional experience 6.2. Feeling 'responsible' for the provision of care 6.3. Personal salience of the event		

** disconfirming evidence also identified*

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[TWO REFERENCES REMOVED FOR BLIND REVIEW]

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