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

ABSTRACT **(312). 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.

KEYWORDS: Midwives, indirect trauma, maternity workforce, posttraumatic stress

MAIN TEXT (4099/ 5000)

## Introduction

In the course of either their work or providing clinical care midwives may encounter events at work that they perceive as traumatic, either by witnessing an event as it occurs during or soon after birth, or by listening to an account of an event as it is recounted to them by a woman in their care. Events where the mother or her infant are considered to be at risk of serious injury or death, and where the midwife experiences fear, helplessness or horror in responses, have the potential to be perceived as traumatic (APA, 2010). Exposure of this nature has been associated with the development of posttraumatic stress disorder (PTSD; APA, 2013). PTSD comprises of distressing and involuntary recollections (e.g., 'flashbacks') of an event, coupled with the avoidance of reminders, a heightened sense of arousal and a more negative emotional state. As PTSD can have a profound, negative impact on personal wellbeing, it is important to understand the nature of events that may lead to this.

Knowledge of the types of obstetric events most frequently reported as traumatic by staff is limited but include fetal demise or neonatal death, shoulder dystocia, maternal death and infant resuscitation (Beck, 2013; Beck & Gable, 2012; Beck, 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.

In-depth interviews with a purposive sample of midwives from the [omitted for blind review] survey provided a comparative analysis of experiences between those with high or low posttraumatic stress (PTS) symptoms and impairment [omitted for blind review]. Findings indicated that the perceived impact of trauma experience and implications for their personal and professional lives differed between high and low distress group. Midwives with high distress were more likely to report feeling personally upset by their experience, and for the event to have held adverse implications for aspects of both their personal and professional life.

Despite acknowledgement of the potential for midwives and other maternity professionals to develop PTS symptoms in response to work experiences, there is little research specifically investigating what sort of events midwives themselves find traumatic (Sheen *et al.* 2014). For purposes of generalisability there is a need to specifically consider the large-scale, questionnaire-based descriptions identifying the nature of events that pose difficulty as this will enable detailed exploration of what may influence perception of trauma. Through this, preventative or supportive strategies can be developed on an informed basis.

## Methods

### *Aim*

To investigate the characteristics of events perceived as traumatic by UK midwives.

### *Ethical Approval*

Ethical approval was obtained from the Department of Psychology (University of *X*) in May 2011.The research was reviewed and approved as suitable by the Royal College of Midwives' Education and Research Committee.

*Design*

Quantitative data from the postal questionnaire survey regarding sample characteristics and psychological impacts after trauma experience has been reported [omitted for blind review]. Information from subsequent in-depth interviews with a smaller subsample of respondents from the questionnaire survey comparing the experience of midwives with high and low resulting distress has been reported elsewhere [omitted for blind review]. This manuscript presents analysis of written event descriptions provided by midwives from this postal questionnaire survey.

*Sample and recruitment process*

Detailed procedure for sampling and postal questionnaire distribution is provided in [*omitted for blind review]*. The final sample included 421 midwives who had experienced at least one traumatic perinatal event corresponding to the DSM-IV (APA, 2000) criterion A for PTSD; where the midwife perceived the mother or her child to be at risk of serious injury or death, and where they (the midwife) experienced fear, helplessness or horror in response. As part of the questionnaire, demographic characteristics (age, gender, education) and professional experience variables (year's qualified, professional designation and current location of work) were collected and midwives provided a short written description of a traumatic 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,

99.8%), and the majority (n= 395, 93.8%) reported that they were currently working in clinical practice. Additional categorical demographic and work-related details of midwives are provided in Table 1.

[TABLE 1 ABOUT HERE]

Six main themes emerged, each with subthemes: (i) event *characteristics* (5 subthemes)*; (ii) organisational context* (2 subthemes)*; (ii) aspects relating to parents* (5 subthemes)*; (iv) perceived conduct of colleagues* (3 subthemes) *and (v) the perception of blame and culpability* (2 subthemes)*.* Themes i-v were present in both witnessed and heard events. The sixth theme was distinctive to the witnessed accounts only and related to *the personal salience of the event* (3 subthemes) for the midwife. Each category is presented with the common subthemes across witnessed and heard first (indicated by 'W & H'), followed by any unique aspects identified exclusively within witnessed ('W only') or heard ('H only') events. An overview of themes is presented in Table 2.

[TABLE 2 ABOUT HERE]

1. Event characteristics

There was a distinct profile to the nature of events perceived as traumatic, regardless of the way in which it was experienced, and all five of the identified subthemes were present in witnessed and heard accounts. Events were described 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]*

### 3. Aspects relating to the relationship with parents

Relationships with women and their partners were an additional aspect reported by midwives, especially where a relationship had been established through prior care. Four subthemes were identified, all relating to aspects of events experienced as traumatic by midwives that related to their relationships or experiences of caring for women and/or parents; (i) presence of *an existing relationship with parents* (W & H), (ii) *supporting or delivering devastating and difficult news* (W & H), (iii) *difficulty witnessing mother's distress* (H only), and (iv) *a difficult relationship with parents* (W only). The latter subtheme involved aspects relating to a perception of threat from parents, perception of a mother not following advice increasing difficulty during the event, or difficulty establishing communication through a language barrier.

#### (i) Presence of an existing relationship with the mother/ parents

*Cared for a woman antenatally who days later subsequently died. I was absent at this time but because I had known her I was sickened by the events. [ID 245 H]*

#### (ii) Supporting or delivering devastating and difficult news

*Discussing the demise of mother and neonate to the partner and father. The loss of your wife and child in the same day - and I am the midwife trying to make sense of the event not only to myself but to a partner 'beyond distress.' [ID 439 W]*

#### (iii) Difficulty witnessing a mother's distress

*A patient had a very traumatic birth and then had a shoulder dystocia, the woman was very upset about the whole experience. [ID 386 H]*

(iv) *Difficult relationships with parents*

*Difficult caring for women and families who become unwelcoming. [ID 126 W]*

*A woman having a VBAC at home against medical advice who developed tachycardia and refused to go into hospital as she considered herself to be at low risk of uterine rupture. [ID 326 W]*

*Death of a baby at term in labour. Mother spoke no English which was very stressful. [ID 245 W]*

4. Perceived conduct of colleagues

Another fourth theme related to midwives' relationships with and perceptions of the conduct of their colleagues. Within this, three subthemes were identified, two of which were common to both witnessed and heard accounts; the (i) perception of *overly forceful interventions* performed by another practitioner, and (ii) the *perception that the abilities of colleagues were limited or care was unsatisfactory* in relation to the care provided. The third theme was identified only within witnessed accounts; where (iii) the *midwife did not feel supported* by colleagues during the event (W only). This highlights the essential nature of workplace support, and how an absence of support from other colleagues can influence midwives' distress during an adverse event.

(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

*Locum GP implying care inadequate in hospital undermining patient's faith in hospital and interfering with grief process - all totally uninformed - very large, nasty, investigation. [ID 121, H]*

*(ii) Attribution of blame*

*When performing antenatal check at a lady's home and not being able to find a fetal heart beat. On arrival to the hospital the scan revealed the baby had died. The lady did not believe it and over the next few days blamed me for the loss [ID 446 W]*

6. Personal salience for the midwife

A final theme, identified only in witnessed accounts, highlighted that midwives' perception of trauma could be influenced by their own personal experiences or circumstances. This category includes three subthemes relating to the (i) *limited experience in the profession*, (ii) perceptions of *responsibility during the event*, and (iii) *personal salience*. Perceptions of responsibility in this context included events where the midwife was the first person to identify a particular circumstance, or where they were primarily responsible for the care of a woman at that time. Personal salience included events where midwives could relate to what happened based on their own personal experiences of childbearing or, as in the excerpt below, when experiencing an event whilst they themselves were pregnant.

*(i)* Limited experience in the profession

*During 2nd shift as newly qualified midwife (night shift) - catastrophic PPH [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

reflects trauma in other contexts (Brewin & Holmes, 2003); events that occur suddenly are more likely to be perceived as traumatic, and could elicit PTSD, as they are more difficult to process into existing memories and beliefs (Ehlers & Clark, 2000). A perceived loss of control which, in the context of the present study was indicated by events where midwives felt unable to control what was happening, is a strong predictor of trauma perception. This is indicated by findings both in relation to women's experience of birth related trauma (Czarnocka & Slade, 2000; Grekin & O'Hara, 2014; Harris & Ayers, 2012) and in the general trauma literature (Ehlers & Clark, 2000).

*Organisational context*

Midwives' reports of difficulty accessing resourses or personnel during a traumatic perinatal event reflect those from a survey of nurse-midwives, who also described feelings of helplessness due to an inability to locate relevant staff during an adverse event (Beck et al., 2015). Similar to perceptions of control, feelings of helplessness are central to the perception of trauma (Ehlers & Clark, 2000). These findings highlight the role of the overall organisational context as contributing to midwives' difficulty.

*Aspects relating to relationships with parents*

Findings from our study, which emphasises relationships with recipients of care as a potential vulnerability factor for midwives, resonates with work amongst midwives and other similar maternity professionals in other settings (Beck & Gable, 2012; Rice & Warland, 2013). Empathic engagement with women is an important determinant of women's positive birth experiences (Moloney & Gair, 2015) and is recognised as an

essential aspect of compassionate maternity care (NHS, 2014). However building a bond with a woman in receipt of care requires empathic engagement, which can theoretically facilitate the internalisation of another individual's traumatic event (Figley, 1996).

*Perceived conduct of colleagues*

A central feature of the midwifery role is to advocate for women to ensure that the care provided is sensitive and safe. Responses included in this theme highlight the potential for midwives to experience distress when they perceive the care provided for women deviates from the desired quality of care. In a study by Wallbank and Robertson (2013) perception of inadequate care predicted traumatic stress responses in obstetricians and midwives after an experience of providing care for a woman experiencing loss, miscarriage and neonatal death. Perception of overly forceful interventions has also been reported as traumatic in previous studies with nurse-midwives and labour and delivery nurses in America (Beck & Gable, 2012; Beck et al., 2015), and findings from the present study confirm this as an aspect of an experience that may contribute to UK midwives' difficulty.

Limited or absent organisational support was identified as an aspect increasing difficulty in midwifery and nursing staff after experiencing miscarriage, stillbirth and neonatal loss (Wallbank & Robertson, 2008). We know from in depth interviews with a subsample of midwives from the present survey, that feeling isolated (physically or psychologically) was reported by midwives with high levels of distress after a traumatic perinatal experience (Sheen *et al.,* 2014). This finding highlights the

importance of a supportive working environment for midwives in the event of an adverse birthing episode.

*Responsibility and blame*

The subtheme of midwives blaming themselves for the outcome of an event reflected findings from Rice and Warland (2013) where Australian midwives described feelings of responsibility, regret and guilt after an event they perceived as traumatic. Investigatory procedures following an adverse perinatal event are necessary to determine a cause (NMC, 2011) and can be instrumental for the improvement of future care. However, present findings indicate that the experience of investigatory procedures may further contribute to the perception of trauma after a difficult perinatal event. At the upper end of the spectrum, where clinical negligence claims may be investigated, involvement in litigation has been found to increase midwives' tendency to practice defensively and reduce confidence in practice (Robertson & Thomson, 2015), and can contribute to a perceived workplace 'blame culture' (Robertson & Thomson, 2015).

*Midwives' personal salience*

A final theme, identified only in witnessed accounts, highlighted that midwives reported events early in their midwifery career as difficult. A limited amount of experience to draw on during a traumatic perinatal event could influence midwives' perceived difficulty when an unexpected and unusually severe or complicated birth occurs. This was also identified by Beck and Gable (2012) in their analysis of written descriptions of events perceived as traumatic by US labour and delivery ward 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

events that are experienced as traumatic may also help midwives to understand and monitor their own responses. Ways of achieving this require development and testing for the pre and post registration midwifery workforce.

Findings also highlight that the organisational context and investigatory procedures, for example surrounding Serious Adverse Events, may contribute to the perception of trauma for midwives. Whilst internal or professional investigations are necessary after an adverse event, it is important to ensure that these are conducted sensitively to reduce any additional adverse impact upon the midwife involved.

Given the increasing pressure on UK maternity services from workforce pressures, increasing birth rates and clinical case complexity (RCM, 2015), it is important to support retention and wellbeing of the existing workforce. Strategies to prevent the perception of trauma will provide one way of supporting retention of the existing workforce, and will also hold beneficial implications for the support of staff to provide safe, quality maternity care (National Maternity Review, 2016). Findings from this survey add to an emerging evidence base that has international relevance for maternity care professionals in other settings who may experience similar types of traumatic perinatal events.

*Implications for research*

It is essential that methods to prepare midwives for, and to prevent the perception of, trauma are developed and evaluated. Identification of effective methods to increase awareness of trauma are required, in addition to the development of effective supportive strategies for those who encounter an adverse event at work.

## Conclusion

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

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

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<br>1.2. Highly severe<br>1.3. Multiple complications<br>1.4. Unable or difficult to control<br>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<br>3.2. Supporting parents, delivering devastating and difficult news | 3.4. Acknowledgement of the mother's experience<br>3.5. Witnessing parents' distress |
| 4. Conduct of colleagues | 4.3. Midwife not feel supported by other colleagues | 4.1. Overly forceful interventions<br>4.2. Perception that the abilities of colleagues were limited or unsatisfactory | |
| 5. Responsibility and Blame | | 5.1. Involvement of professional investigation<br>5.2. Attribution of blame | |
| 6. Personal salience *(Witnessed events only)* | 6.1. Limited professional experience<br>6.2. Feeling 'responsible' for the provision of care<br>6.3. Personal salience of the event | | |

** disconfirming evidence also identified*

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[TWO REFERENCES REMOVED FOR BLIND REVIEW]