Midwives ways of coping with crises

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Sammandrag:
Barnmorskors utsatthet för kritiska och traumatiserande händelse i samband med sitt yrke är relativt väl dokumenterat på en global nivå. Att ständigt och återkommande vara utsatt för trauma leder lätt till symptom som obearbetat kan ha långvariga konsekvenser för barnmorskans arbetsförmåga och dess förmåga att ge god och empatisk vård. På global nivå har även bristen på barnmorskor, tanken att lämna yrket samt sjukskrivning kunnat härledas till obearbetade kritiska händelser inom arbetet.
Syftet med forskningen är att klargöra vilka metoder barnmorskorna använder för att klara av kriser de bemöter i arbetet samt hur dessa metoder påverkar deras förmåga att ge god och empatisk vård.
Denna forskning är en kvalitativ forskning som koncentrerar sig på hur barnmorskor vid en förlossningsavdelning hanterar krissituationer de bemöter i arbetet. Arbetet är ett beställnings arbete av Helsingfors och Nylands Sjukvårdsdistrikt. Materialet till mastersarbetet samlas genom personliga intervjuer med barnmorskor med hjälp av Critical Incident intervju-metod. Materialet transkriberas och analyseras med hjälp av induktiv data-analys.
Sammanlagt gjordes åtta intervjuer under vilka 53 kritiska incidenter nämndes.
Resultaten visar att barnmorskorna använder sig av en mängd mer eller mindre medvetna metoder för att hantera kriser. Det vanligaste var diskussion med kollega samt att tvinga sig att glömma. Många bär på trauma sedan flera år tillbaka som fortfarande påverkar deras arbete direkt eller indirekt.
Behovet av vidare forskning inom de finländska barnmorskornas mentala välbefinnande är signifikant. Behovet av effektiva metoder för ökandet av resiliensen bland barnmorskor men även övrig vårdpersonal är framträdande.

Nyckelord:	Compassion fatigue, Presenteeism, Coping, Midwifery Secondary trauma, Empathy, Hospital District of Helsinki and Uusimaa
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Abstract:

The influence of a critical and traumatic work related event on a midwife is relatively well documented globally. Continuous and recurrent exposure to trauma leads to symptoms that untreated can have long-term consequences for the midwife's ability to work and her ability to provide good and empathic care. At a global scale the shortage of midwives, the thought of leaving the profession, persenteeism and sick leaves have been traced to untreated traumatic events within the profession. The purpose of this thesis is to clarify the coping methods midwives use to cope with crisis they face at work and how the used coping methods influence their ability to give good and empathic care.

This thesis is a qualitative research which concentrates on how midwives at a delivery ward cope with crisis situations they encounter at work. The work is commissioned by the Hospital district of Helsinki and Uusimaa. The data is gathered through personal interviews with midwives using critical incident technique. The data is transcribed and analyzed through inductive data analysis.

A total of eight interviews was made in which 53 critical incidents was mentioned. The results show that midwives use a variety of coping methods that are more or less intentional in order to cope with the crisis. The most used were coping by discussion with colleagues and forcing oneself to forget. Many carry traumas from years ago that still influences their work directly or indirectly.

The need of further research within the Finnish midwives mental well-being is significant. The need of effective methods to increase resilience amongst midwives and also other health care professionals is prominent.

Keywords:	Compassion fatigue, Presenteeism, Coping, Midwifery Secondary trauma, Empathy, The Hospital District of Helsinki and Uusimaa
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Tiivistelmä:

Tutkimus on osa Arcadan, Diakin ja University of Eastern Africa Baratonin yhteistyökoulutusta, Masters of Global Health Care.
Tutkimus on kvalitatiivinen tutkimus kätilön selviytymisestä työssään kohtaamista kriisitilanteista. Tutkimuksen taustana on tutkimusten osoittama tieto käsittelemättömien kriisien negatiivisesta vaikutuksesta terveysalan ammattilaiseen ja sitä mukaan mahdollisuuteen antaa hyvää hoitoa. Tutkimuksen tavoite on kartoittaa kätilöiden tarve henkiseen ensiapuun. Tutkimus pyrkii antamaan työkaluja, henkisen ensiavun kehittämiseen työntekijöiden tarpeista lähtöisin. Ja sen avulla voidaan vähentää kriisien aiheuttamaa lyhyt- ja pitkäaikaista stressireaktiota ja sairauspoissaoloa, sekä parantaa selviytymistä haastavassa työssä kohtaamista kriiseistä.

Materiaali kerättiin yksilöhaastattelulla. Yhteensä kahdeksan haastattelua tehtiin käyttäen Critical Incident menetelmää. Materiaali analysoitiin induktiivisella analyysi menetelmällä.

Yhteensä 53 kriittistä tapahtumaa mainittiin. Tulokset osoittavat kätilöiden kantavan suurta määrää käsittelemättömiä tapahtumia joilla edelleen on vaikutuksia työhön. Keskustelu kollegan kanssa sekä väkinäinen unohtaminen olivat yleisimmin ilmenevät menetelmät. Tarve syventävälle tutkimukselle aiheen ympärillä nousi vahvasti esiin. Resilienssin voimistaminen ja tehokkaiden menetelmien kehittäminen ja käyttöönotto on tärkeää.

Avainsanat:	Compassion fatigue, Presenteeism, Coping, Midwifery Secondary trauma, Empathy, Helsingin ja Uudenmaan Sairaanhoitopiiri
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CONTENTS

FOREWORD

The process of this Master's thesis has spread like ripples on water. It has been an eye opener to learn about the global extent of the impact of crisis encountered at work especially amongst midwives but also amongst all health care professionals. Through this Master's thesis an urge to dig deeper into the causes and even more, the effective coping methods has emerged.

I would like to thank the informants who participated in this research and so openly shared their experiences. I felt extremely privileged to take part of your highly sensitive stories.
A special thanks to the commissioner, Hospital district of Helsinki and Uusimaa
I also wish to direct a humble thanks to my family who supported me and made all this possible.
Special gratitude needs to be directed to my highly appreciated supervisor Gun-Britt Lejonqvist who has guided with a firm and knowledgeable hand through the whole study process.

Esbo March 2018

Henrika von Schantz-Enoksson

1. INTRODUCTION

This research is a commissioned work by the department of women's health at the Hospital district of Helsinki and Uusimaa. The aim is to clarify the needs of mental first aid and defusing amongst midwives at the delivery ward. Through this a tool for enabling the long term well-being of the midwife and hers/his ability to give good care is created. In order to conduct this research as a study permit has been granted for from the University Hospital district of Helsinki and Uusimaa. Before this the thesis proposal was also approved by Arcada University of applied sciences.

This research is conducted by the guidelines for thesis writing set out by Arcada University of Applied Sciences. The thesis commits to follow good scientific practice. This includes ethically sustainable data-collection which means amongst others that the informants are correctly informed of the purpose of the research, their right to privacy is confirmed and their participation is based on their free will. (Metsämuuronen, 2008; Good Scientific Practice at Arcada)

This thesis has its background in the question of how midwives at a delivery ward in the Hospital district of Helsinki and Uusimaa cope with crisis situations they confront during their everyday work. In Finland all are registered nurse-midwives or a bachelor's degree in midwifery. Midwives at the delivery ward care independently for women and babies in normal deliveries. Midwives work in close collaboration with the obstetricians when complexities occur.

Work at a delivery ward is most often a profession where joy, happiness and thankfulness is the main emotions. The bond between a midwife and a woman giving birth and her family is deep and often differs from the normal patient-caregiver relationship. Despite this, a midwife will also be confronted with unexpected crisis situations and traumatic events during the end of pregnancy or during delivery. These events are most often more or less unexpected and proceed very rapidly. In some cases, it may be thought of as everyday life for a midwife but it does not mean it does not affect personally. The influence of this is possible compassion fatigue, vicarious traumatization and secondary

traumatic stress and also in some cases post-traumatic stress amongst midwives have been somewhat documented globally but not nationally and not according to crisis situations.

Globally the shortage of certified midwives is a growing problem that an increasing number of countries are facing. One reason is according to many studies said to be midwives leaving or contemplating to leave their profession due to work related stressors and trauma. WHO (2015) and UNFPA (2014) (United Nations Population Found) states the importance of not only the availability of midwives but also the quality including motivation for midwifery. (Hildingsson et. al. 2016; Hunter & Warren 2014; Wright et. al. 2017; Pezaro et. al. 2016)

In this study the focus will be on the words crisis, trauma and coping. Crisis refers to the Greek word krisis, that means a severe critical incident, a surprising significant turn to the worse (Malmström et al. 2002; Palosaari 2008), or "an emotionally stressful event or a traumatic change in one's life" (The American Heritage science dictionary). Crisis is an event where earlier experiences are not enough to process an event without suffering. Trauma refers to an uncontrollable sudden event causing extreme psychological stress. Coping methods refer to the way a person feels she or he deals with the stress or trauma the crisis has brought. The intention of coping is to maintain the ability to function as a whole regardless of the experience. (Hedrenius& Johansson 2013; Palosaari 2008)

When talking about a crisis at a delivery ward it refers to crisis situations that occur more or less unexpected, having a great impact on the mother, the baby or both. The actual nature of the crisis may vary from traumatic deliveries, illness of mother or baby to loss of lives. A crisis can also be any other incident at the workplace happening expectantly and affect the work community or individual worker. In this research the focus is not on the actual crisis event but on the reaction it has on the midwife.

The research questions are narrowed down to focus on the midwives coping methods after a crisis. The literature review shows the costs of not dealing correctly with crisis situations and its impact on the ability to give good care and maintaining a good work ability. The aim of this research is to clarify the coping methods midwives use to cope with crisis they

face at work and how the used coping methods influence their ability to give good and empathic care.

At the Hospital district of Helsinki and Uusimaa, there is a trained mental first aid team in terms of defusing, available for the personnel in case of a critical incident. The term defusing is used in this research but other terms used in literature are crisis intervention, mental first aid, relief discussions amongst others. They follow a defusing protocol which means that the group of colleagues influenced by the critical incident gather for an immediate discussion lead by a skilled professional. The aim is to first of all help get a whole picture of the event and also get help dealing with the reactions that occur (Hammarlund, 2001; Palosaari 2008). However, this service has been used only to a very small extent the delivery ward. Also the Ministry of Social affairs and Health in Finland has legislated the need to provide psychosocial care in case of trauma (STM 2017). Still, the overall feeling when talking to colleagues, both midwives and doctors, is that the work at a delivery ward is mentally challenging and the crisis situations that occur can lead to stress and anxiety for long periods of time.

The thesis is a qualitative study about midwives coping methods when facing crises situations at work. The design will be a combination of naturalistic and purposeful approach. Whereas the study will be based on real life situations and the informant's personal experience and feelings. The data will be gathered by interviews using critical incident technique (CIT). The informants will be chosen on their experiences and knowledge that gives deep information on the issue. (Berg et. al. 2012)

2. RESEARCH REVIEW

The research review was done using internet databases Pub-Med, EBSCO, and Research Gate, Google scholar and also the Finna search engine provided by the University. Search words used for literature search was secondary trauma, empathy, coping with crisis, compassion fatigue and midwifery. The search was mainly limited to researches made within five years but in some cases even older studies where included. The languages included where English, Swedish and Finnish. No other limitations where used. A table of relevant research was made as an overview (appendix 3). Reference list of relevant articles was also reviewed and through this relevant sources where found and included. Contacts with other researchers within this area such as Judith Anderson and Debra K. Creedy, through Research Gate gave an insight in current research around the topic and also resulted in relevant articles and researches.

Midwifery is most often seen as a work of joy and happiness making it difficult for midwives to express the negative sides of the work and how they are affected by this (Wright et. al. 2017; Pezaro et. al., 2016). Many studies have been made about the psychological consequences recurring crisis brings if left untreated. Researches about work related stress and psychological strain amongst midwives has during the latest few years been a subject in a rising manner all over the world (Leinweber& Rowe, 2010; Rice & Warland, 2013; Sheen et. al. 2014; Beck et. al, 2015; Sheen et. al. 2015; Sheen et. al. 2016a; Sheen et. al. 2016b; Pezaro, 2016; Leinweber et. al., 2017 b; Creedy et. al. 2017; Hunter & Warren, 2016; Hildingsson et. al., 2016; Wright et. al. 2017; Schrøder et. al. 2016; Pezaro et. al. 2016; Wahlberg et. al. 2017).

Also secondary traumatic stress and compassion fatigue related to nursing in general is well documented in the past. (Bovopoulos et. al 2016; Berg et. al 2016; Von Rueden et. al. 2010; Henson 2017; Ludick & Figley, 2016; Cocker & Joss, 2016). Pezaro (2016) and Pezaro et. al. (2016) studied both the occupational and organizational related critical and stressful incidents amongst midwives and the need of intervention support.

The many studies about the influences of critical incidents, trauma and distress in all its forms show the need of significant methods of coping and maintaining good work ability

as well as opportunities for stress reduction (Wright, 2017; Wright et. al. 2017; Pezaro et. al. 2016). The shortage of literature around coping strategies in stressful situations amongst midwives however shows the need to explore this area (Halperin et. al. 2011; Hunter &Warren 2014; Wright et. al. 2017; Pezaro et. al. 2016)

This research is narrowed down to midwifery because of the highly sensitive and empathic relationship between the midwife and the patient and the vulnerable situation it brings for the midwife's mental well-being. This research concerns all critical incidents appearing at a delivery ward both organizational and occupational. The focus will be on the coping mechanisms that allows resilience and the aim to retain the ability to work.

Earlier research in this area shows that midwives are in a higher risk of suffering from work related stress, associated with crisis or trauma events at work, compared to other caring professions due to the close relationship between the midwife and the woman (Leinweber& Rowe, 2010; Sheen et. al. 2014; Pezaro, 2016; Beck et. al., 2015). As midwifery strives to provide excellence in maternity care it is extremely important that effective support is given to meet the work related distress. Pezaro (2016), Pezaro et. al. (2016) and Wright (2017) indicate that midwives all over the world experience work related psychological distress. Pezaro et. al. (2016) also highlights the clear link between the wellbeing of the midwife and the quality of patient care. Avoidance and persistence are the mainly used coping strategies and most midwives tend to suffer in silence. The emotionally intense situations midwives encounter at their work requires skills to handle the rising emotions, in order to be able to carry on providing excellent care. This is however, largely unrecognized and undervalued. (Rice & Warland, 2013; Leinweber& Rowe, 2010; Beck et. al. 2015; Pezaro, 2016; Hunter & Warren, 2016; Pezaro et. al 2016)

Leinweber & Rowe (2010) describe that in a study about burnout rates among human service employees only prison officers scored higher than midwives in client-related burnout. According to Bovopoulos et. al. (2016) 31% of full time workers suffering from mental illness had not recognized they suffered from a mental health problem and therefore had not asked for help. Beck et. at. (2015) found that amongst a total of 719 midwives in USA, 29% reported severe or high secondary traumatic stress and 36% screened positive for the diagnostic criteria for post-traumatic stress due to attending

traumatic births. In the UK Sheen et. al. (2015) found that 33% of 421 midwives suffered from symptoms of post-traumatic stress. According to Leinweber et. al. (2017b) cross-sectional study of a total of 578 midwives, about the correlation between midwives personal and work related stress factors and the risk of post-traumatic stress, symptoms of peri-traumatic stress shortly after a traumatic birth was common. In this study 75% (n=451) had feelings of horror, 51% (n= 305) recalled fear and 82% (n=488) felt guilty of what happened to the woman. Halperin et. al. (2011) found that there are several work related situations that have an impact on the midwives emotional well-being as well as ways by which they can regulate their emotions and carry on with their work. No earlier studies have been found about Finnish midwives well-being within this area. (Bovopoulos et. al. 2016; Leinweber & Rowe, 2010; Beck et. al. 2015; Sheen et. al. 2015)

Rice & Warland's (2013) study about ten midwives' experiences of witnessing traumatic births at the University of South Australia. The study was conducted using semi-structured interviews to determine if the midwives see themselves in negative psychosocial risk. The result of this study led to three main themes: 'Stuck between two philosophies', 'What could I have done differently' and 'Felt for the woman'. In this study the midwives felt that their trauma came from the feeling of not doing their job as a midwife when not protecting the woman from trauma. The result of this study was that many midwives express the experience of traumatic births and that it affects their ability to work. Some felt they got help from colleagues, family and friends but that they still feel that the impact of witnessing a traumatic birth was disregarded and dismissed at their workplace. The opportunity of counselling and mental first aid was seen to be assisting midwives who showed symptoms of vicarious traumatization and secondary traumatic stress. (Rice & Warland, 2013)

Because of the special bond between a midwife and the mother the midwife is set in a risk of secondary traumatization. Rice & Warland (2013) as well as Pezaro (2016) mention that the need to assert boundaries between the midwife and the mother in order to protect the midwife from traumatic stress. But the fact if this actually would protect the midwife without harming the sensitivity, satisfaction and effectiveness of their work is unknown. Leinweber et. al. (2017b) indicates that un-empathic and emotionally distant care correlates to the feeling of being unsupported during delivery amongst women. The

impact of feeling unsupported during delivery has long term effects for the woman and her experience of giving birth (Ford &Ayers, 2011) This can be seen in the increasing numbers of women diagnosed with fear of child birth (Hildingsson et. al. 2016). (Rice & Warland, 2013; Sheen et. al. 2014; Pezaro et. al. 2016)

Also Leinweber & Rowe (2010), Beck et. al. (2015) and Leinweber et. al. (2017 b) take hold of the highly empathic relationship between the midwife and the mother as a risk for secondary traumatization and stress. Halperin et. al. indicates that there might be a correlation between a higher empathy towards the woman if the midwife was a mother herself. And at the same time the achievement of an empathic relationship is the core of good care in midwifery (Leinweber & Rowe, 2010; Leinweber et. al., 2017 b). The definition of empathy is according to Leinweber et. al. (2017 b) the synchrony and accurate emotional resonance with another person. Sheen et. al. (2014) and Ludick &Figley (2016) defines empathy as the cognitive and affective ability to experience other people's mental stress, emotions and suffering.

The conflict between the feeling of being 'with woman' or 'with institution' led to the feeling of frustration and powerlessness. Leinweber & Rowe (2010) highlight the need of acknowledging the risk factors midwifery work has on the midwife's psychological health. A conflict occurs when the midwife protects herself from secondary traumatic stress by "withdrawal from emotional intensity and a reduction in their level of empathic identification" (Leinweber & Rowe, 2010) and the mother's increased need of empathic identification in case of a traumatic event. The midwives expressed the importance of a balanced relationship with the woman as a strengthening factor. On the other hand, a demanding relationship was experienced as requiring more emotional work by the midwife. (Leinweber & Rowe, 2010)

The psychological distress amongst midwives is not only due to the direct patient care. High staff sickness rates, staff turnovers and low productivity rates (Pezaro 2016) as well as lack of communications with head of staff and poor work place organization (Halperin et. al. 2011; Pezaro et. al., 2016) are also psychologically wearing. Distress can also be due to a correlation between these two (Pezaro, 2016). The cognitive impairment, reduction of decision-making and the ability to provide safe, high quality and

compassionate care are reactions the psychological distress might have on the midwife. Halperin et. al. (2011) found that there is a significant contrast between the professional expectation of support a midwife is expected to provide their patients and the insufficient support given the midwives themselves by their colleagues and supervisors. Pezaro et. al. (2016) highlights the clear link between the wellbeing of the staff and the quality of care. (Pezaro, 2016; Pezaro et. al., 2016; Halperin et. al. 2011)

Midwives who attend traumatic births (Beck et. al. 2015; Sheen et. al. 2016a) or suffer from work-related distress (Pezaro, 2016) report feelings of guilt, shame, sadness, anger, anxiety and numbness as a result of their experiences. Reoccurring nightmares, flashbacks and loss of belief in the birthing process was other symptoms described. Some became more guarded, cautious and suspicious regarding births. Some even felt "a pervading sense of fear and a sense of intense doom as the birth got closer" (Beck et. al. 2015). Depression, depersonalization, burnout, compassion fatigue and even suicides are consequences of work related distress. The influences on the midwifes self-perception can last for days and even years. In Halperin et. al. (2011) midwives where found to feel that their personal and professional competency was challenged making them feel emotionally overwhelmed, alone and like failures. (Beck et. al. 2015; Pezaro, 2016; Sheen et. al. 2016a; Halperin 2011)

It is common among midwives to contemplate their boundaries regarding professionalism, responsibilities and their place amongst colleagues as an effort to process a critical event (Halperin et. al., 2011). Factors that help midwives cope with their trauma are according to Beck et. al. (2015) and Halperin et. al. (2011) support by colleagues and obstetricians along with neonatologists and nurses (Wahlberg et. al. 2017). The help and support of the team was considered to be in a significant role. However, midwives are known to not acknowledge their need of support due to the midwifery culture. The high ethic of self- sacrifice and service and conformity are in key role of midwifery. (Halperin et. al., 2011)

On the other hand, Beck et al. (2015) and Halperin et. al. (2011) also report of the impact when not being supported by colleagues and the team. Midwives who were left without peer support felt betrayed and abandoned. Some even felt their work environment was

hostile because of the lack of support. Work related stress can also be due to unpleasant team interactions. Sheen et. al. (2014) as well as Pezaro (2016) take hold of the fact that conflicts, bullying and hierarchical, toxic and uncivil environments within midwifery profession has been reported. The feeling of fear in disclosure and shame as well as apathetic and punitive responses to psychological distress in the workplace are things that Pezaro (2016) brings up. In these cases, it can be challenging to encounter a trusted relationship to co-workers and therefor disabling a positive help seeking culture. It is crucial for the midwife to receive support from supervisors and colleagues because of the aspects of professional approval and emotional strengthening. (Beck et. al. 2015; Sheen et. al. 2014; Pezaro, 2016; Halperin et. al., 2011; Pezaro et. al. 2016; Hedrenius& Johansson, 2013)

There is a reported link between exposure to traumatic births and defensive practice and overestimation. The likelihood of practicing defensive medicine was doubled according to Leinweber et. al. (2017 b). Defensive practice leads to quicker interventions, conservative care and actually impair the quality of care rather than improves it (Wright et. al. 2017) The fear of litigation was in the midwives' minds after traumatic events. Midwives who had been sued due to traumatic births felt that the process was a torture of re-traumatization. Fear of litigation fuels the culture of reliance on technology and biomedical paradigms as a 'insurance' or safeguard against blame. As a result of this many midwives feel that their ability to give woman centered care is limited (Hildingsson et. al. 2016). Midwives felt they lacked a place to safely talk about their experiences and "unburden their souls". The lack of time to process a traumatic incident before the next patient was described as a daunting task. The impact of attending traumatic births, led to midwives contemplating their careers and even leaving the midwifery practice (Hunter & Warren, 2016; Beck. et. al., 2015; Sheen et. al. 2016a). Leinweber et. al. (2017b) found that in their study 46% of the midwives had intentions to leave their profession. Midwives with probable post-traumatic stress were four times more probable to intend to change their careers. In Sheen et. al. (2015) 35% (n=148) had seriously considered to change profession after a traumatic birth. (Beck. et. al., 2015; Sheen et. al. 2016a)

The attrition and impairment that is the result of traumatization after attending traumatic births needs to be addressed and targeted within the midwifery profession to induce

workforce retention (Creedy et. al., 2017; Halperin et. al. 2011). The impact of reactions after witnessing a traumatic birth needs to be reduced in order to limit re-traumatization and induce work satisfaction and retention within the profession. Mandatory protocols that are used in other professions, such as law enforcement and the rescue department, in case of critical incidents to improve outcomes, should be implemented also in midwifery. Beck et. al. (2015) suggest that in order to help midwives maintain a good practice, standards for recognizing rare but expected traumatic births should be developed and implemented in the daily work. The use of clinical supervision specialized in midwifery should be developed since it would provide midwives an opportunity to reflect on their emotions and to step back and become more self-aware of their interactions with both colleagues and patients (Halperin et. al., 2011). Due to the complex realities midwives encounter during their daily work innovative recourses should be developed in order to assist midwives with their coping in order for them to feel valued and nurtured. (Beck. et. al., 2015; Leinweber et. al., 2017b; Halperin et. al. 2011)

2.1 Experiences of crises

In the past crisis care has focused on the thought of going through phases of crisis reactions. Professionals within crisis care, thought their purpose was to help the suffering to get through certain phases of crisis reactions in order to process in 'the right way'. Another wrongfully used saying in crisis and trauma care is 'look forward and do not dig in the past tearing up old wounds'. The purpose of trauma care is to deal with the reactions and emotions coming up and always close the suggested 'opened wounds' as well as clarifying the event as clearly as possible. The features in how a crisis or trauma is experienced depends amongst others on psychological, biological, social and existential factors. When discussing and planning trauma and crisis care one needs to remember that not all people get traumatized by the same incident and not all traumatization leads to long term illness. (Hedrenius& Johansson 2013; Hammarlund 2001; Palosaari 2008)

The word midwife is an ancient English word that means `woman assisting´, `woman who is with´. The word has its origin in the meaning with (mid) woman (wife) (Harper, 2010). Already the word indicates the close relationship between a midwife and the

patient. A midwife is at a higher risk of emotional stress when caring for mothers in a crisis situation as the relationship between the woman and the caregiver is more close compared to other health care professions The relationship between a mother and her midwife is highly emphatic and therefore leaves the midwife vulnerable for emotional stress when witnessing a trauma or crisis. (Leinweber& Rowe, 2010; Sheen et. al. 2014; Pezaro, 2016; Beck et. al., 2015).

Empathy and the ability to identify the need of empathy is in key role in midwifery work. However, if the intake of disturbing information is not managed, the empathic ability can become a burden (Ludick &Figley, 2016). Being 'a professional' within health care, is often seen as having the ability to 'manage the worst case off them all', without being personally affected (Hedrenius& Johansson 2013). The ability to give help in an actual professional manner is closely related to the ability to be present and responsive. Being responsive and present also makes one vulnerable. The feeling of suffering as prof. K. Eriksson expresses in her book 'The suffering human Being' (1994) from the patient's point of view can as well be seen in the relationship between the midwife and the birthing woman. Seeing the other person's suffering becomes one's own. Through courage the midwife sacrifices herself for the wellbeing of the patient. The professionality in being a midwife gives some protection and understanding for the suffering. Leinweber & Rowe (2010) explains this as "This personal emotional investment can lead to negative effects suffered by health-care professionals, termed 'the emotional costs of caring'". (Leinweber & Rowe 2010; Eriksson, 1994; Hedrenius& Johansson 2013; Ludick & Figley, 2016)

Research about an individual's experience of a crisis event, always relates to an event in the that already has happened. Since research is not ethically nor practically possible to conduct within a crisis event, research of this type is mostly reliable on the person's memories of the incident. Therefore, there is a risk of *memory bias*, which means that a person who is suffering is more likely to contemplate and remember possible reasons to the suffering than someone not suffering. Leading to a selective memory of the incident. This means that the memory of the incident is dependent on the persons psychological wellbeing before the incident. People that are mentally stressed from before tend to react stronger than people who experience mental well-being. This enhances the need to improve and maintain strong mental care amongst midwives in order to minimize the

effects of a crisis. This also gives an explanation why the reactions of one incident can vary between the people affected. Symptoms of post-traumatic stress amongst midwife may affect negatively on their clinical decision making skills and affect the relationship between the midwife and the woman giving birth. Good emphatic care is the core of all healthcare. In order to be able to give good, empathic care the caregiver needs to be able to be mentally and physically present and feel empathy and compassion towards the patients and their family. (Rice & Warland, 2013; Leinweber et. al 2017a; Hedrenius& Johansson 2013)

2.2 The cause of crisis and trauma

Crisis and trauma is caused by an event or happening that is massive and uncontrollable and results in extreme psychological distress. The core of the trauma is the feeling of helplessness, extreme horror or fright and anger. The trauma is often experienced as meaningless and violating the integrity of one's personal life. The incident makes the experiencer question one's fundamental values and human relationships. The causing of a trauma is related to what causes the trauma, what the actual trauma is and what kind of experiences the person has encountered. Also the personal qualifications and features plays a role in how the trauma or crisis is experienced. The meaning of the incident is crucial for how it is experienced. (Palosaari, 2008; Hammarlund, 2001; Hedrenius& Johansson 2013)

Leinweber et. al. (2017b) brings out the influences of the midwives' trauma experiences in her personal life, in relation to the risk of work related post-traumatic stress. However not all people react on a crisis or traumatic event by becoming traumatized (Levine, 1997) Therefore, it is not preferable to call an event traumatizing instead the term *potentially traumatizing* should be used (Hedrenius& Johansson 2013). A person's own ability to heal and recover is of grate meaning when it comes to crisis and trauma care. Sheen et. al (2014) mentions in their research about the impact of indirect trauma exposure amongst health care professionals and potentially also midwives, that the actual content of the trauma or crisis is less significant. The significance is the exposure to trauma and the reactions it brings. (Hedrenius& Johansson 2013; Hammarlund 2001; Palosaari, 2008; Sheen et. al. 2014;)

When experiencing a crisis, it may result in lack of trust and confidence towards the system or government. In a work place environment, the risk of losing faith towards colleagues and the superiors depending on how the situation is handled, if support is not received or how the aftermath is managed. There is a risk that the suffering loses the ability to maintain a trusted relationship as well as the ability to receive help even though it is offered. (Hedrenius& Johansson 2013)

2.3 Crisis support

The aim of crisis support, crisis intervention or defusing as it also can be called, is to enhance resilience and prevent negative psychological and physical affects. This means to improve the ability to manage stress, as well as to protect from further suffering. Crisis support is always based on the current incident and the persons affected. When discussing the method of crisis support the perspective of both the individuals and the management system in use needs to be taken into consideration. In environments where the support is expected to be given by close ones, in this case colleagues, the help can be seen as easy to get and achieve. On the other hand, if the mental first aid is expected to be provided by the management, there is a risk that help is not sought for, even though it would be needed due to fear of seen as week. Colleagues fear of pushing help too much on another might also leave someone without help, even though it would be needed. To ask help later, might cause fear of stigmatization. Palosaari (2008) talks about how survivors from the tsunami 2004 expressed that they wished to not be left alone and that psychological help needs to be offered several times if they are refusing. Also when it comes to healthcare providers psychological help needs to be offered and several times. (Hedrenius& Johansson 2013; Palosaari 2008; Hammarlund,200)

2.4 The impact of crisis

Modern research has not only done progress in crisis knowledge and care but also the neurological impact of crisis and trauma has been well documented. With modern technique neuroscience research has been able to study the brain and its functions in the relationship between genes and the environment. Through research it has become possible

to identify that trauma does not only have psychological effects but also physical. Depression, substance abuse, self-harm, phobias and uncaring behavior as well as connections to hypertension, diabetes and cancer are effects of cumulative traumatic stress. Within occupational health the impact of crisis on the midwifes overall health needs to be taken into consideration since shifts work itself already has a negative impact on health and increases the risk of non-communicable diseases. (Soares et. al. 2012; Pryce, 2016; Wickremaratne 2017; Hedrenius &Johansson 2013)

Untreated or cumulative crisis events might lead to '*trauma memories'* (Palosaari, 2008) or *intrusion* (Hammarlund, 2001), meaning that certain similar events bring up the traumatic memories, reactions and flashbacks. This might lead to defense mechanisms such as instinctive *avoidance* of situations triggering trauma memories. Amnesia, isolation, feeling of being left out and emotionlessness are connected to this as well. If several traumatic incidents appear closely to each other it might lead to putting the first one aside whilst dealing with the second. This leads to cumulative stress or trauma memories that might pile up to vicarious traumatization which refers to harmful changes occurring in a professional's view of themselves and their surroundings as a result of exposure to trauma. (Palosaari 2008; Hammarlund, 2001; Dyregrov, 2002; Baird & Kracen, 2006)

3. THEORETICAL FRAMEWORK

The theoretical framework in this study is based on what aroused from the research review. The challenging work of a midwife in the delivery ward with rapidly evolving and more or less unexpected crisis situations leaves the midwife vulnerable for mental health problems if left untreated. Leinweber & Rowe (2010) divides the "costs of caring" into four different stages. The first and also the simplest is compassion fatigue, the second being post-traumatic stress disorder, the third secondary traumatic stress and the fourth according to Leinweber & Rowe (2010) is vicarious traumatization. There is a significant overlap in the responses to a traumatic event when it comes to symptoms, timeframe of the symptoms appearing and the causes. Post-traumatic stress disorder (PTSD usually occurs immediately after being exposed or indirectly being exposed to a traumatizing event. Secondary traumatic stress, Compassion fatigue and vicarious traumatization usually occurs after indirect exposure or treating a patient that's being exposed. Unlike vicarious traumatization that develops gradually and after repeated exposure, posttraumatic stress, secondary traumatic stress and compassion fatigue can also develop immediately after the trauma. (Sheen et. al. 2014; Henson, 2017)

In this study the focus will be on the midwives' personal experience of crisis situations at work. Therefore, compassion fatigue and secondary traumatic stress and also vicarious traumatization will remain in the main focus.
This research will focus on the midwives' personal experiences of crisis situations they faced at their work. An analysis will be made out of the material gathered from the interviews and the theoretical framework.

3.1 Secondary Traumatic Stress

Secondary traumatic stress is an often unavoidable and highly complex experience among health care personnel. Secondary Traumatic Stress has close symptoms to post-traumatic stress. Post-traumatic stress is defined as an anxiety disorder caused by a direct trauma that involves intense fear, horror and helplessness. Peri-traumatic distress refers to the reactions one encounters during or shortly after a traumatic event. The more severe the

peri-traumatic distress is the higher is the risk of post-traumatic stress. The distinction between secondary and post-traumatic stress is mainly that persons suffering from secondary traumatic stress experience trauma caused by close exposure or involvement with one exposed to the trauma, not actually being the victim oneself. Secondary traumatic stress refers to the symptoms experienced by the helper, care giver or rescuer who cannot save or help the patient or the victim and results in guilt and distress. Secondary traumatic stress includes the feeling of empathy towards the victim. Within health care workers the cause of the Secondary traumatic stress is not likely to emerge from one single event. It is usually a result of repeated and often untreated exposure to work-related traumatic events. Due to this there is no standardized time frame from exposure to symptoms when it comes to secondary traumatic stress as in comparison to the one-month time frame for post-traumatic stress. (Cocker & Joss, 2016; Rice & Warland, 2013; Leinweber & Rowe, 2010; Sheen et. al., 2014; Leinweber et. al., 2017a; Henson, 2017; Ludick & Figley 2016)

Secondary traumatic stress amongst health care personnel is as likely to have its origin from direct exposure to the trauma as indirect exposure. Leinweber & Rowe (2010) express that there is no significant difference in the reactions and symptoms of secondary traumatic stress in nurses directly caring for a traumatized patient than nurses working close by but not with the patient. They (Leinweber & Rowe, 2010) also indicate the importance of noticing that everyone exposed to the trauma is in risk of developing traumatic stress reactions. On the other hand, it is as important to remember that not everyone develops secondary traumatic stress reactions after trauma, this is also defined as resilience. (Leinweber & Rowe, 2010; Hedrenius & Johansson, 2013; Palosaari, 2008)

According to Leinweber & Rowe (2010) health care professionals with history of trauma, poor social support, lack of psychological well-being, low socioeconomic status, low education and female gender are in higher risk of experiencing secondary traumatic stress after indirect exposure to trauma. However, the intra- and post- trauma situation such as lack of social support, additional life stress and trauma severity is still seen to be of greater impact on the likelihood of developing secondary traumatic stress (Leinweber & Rowe, 2010; Hedrenius & Johansson, 2013).

Secondary traumatic stress often occurs as arousal, intrusion and avoidance. Sheen et. al. (2014) report of symptoms of secondary traumatic stress among midwives as nightmares, memories that last several years. They also found that feeling of guilt and 'raising a shield' were symptoms of secondary traumatic stress.

3.2 Compassion fatigue

Compassion fatigue is a term for stress resulting from exposure to a traumatized individual, or the direct traumatic incident. Compassion fatigue is not only caused by just one trauma, it is as likely to be caused by reoccurring stress, fatigue and strain caused by critical incidents in the day to day work. Amongst health care workers this type of secondary traumatic stress is causing a negative impact on their physical and mental health as well as their own safety and wellbeing, and therefore also to patients and work climate. The influence of confronting crisis situations might, if untreated, lead to compassion fatigue which is common amongst healthcare professionals. Compassion fatigue is a form of stress, weariness and strain in caring for others that are suffering. Compassion fatigue can in some cases be seen as the culmination of secondary traumatic distress or burnout. (Leinweber & Rowe, 2010; Cocker & Joss, 2016; Henson 2017)

The most common symptoms of compassion fatigue are exhaustion, sadness, irritability, anger, reduced ability to feel empathy and sympathy, loss of energy and vitality. The ones who suffer from compassion fatigue often feel they have lost their ability to nurture and care. It leads to negative coping behaviors as alcohol or drug abuse and also reduced sense of satisfaction or enjoyment with work. Some experience cognitive re-experiencing including nightmares and intrusive thoughts. Persons suffering from compassion fatigue are also more prone to absenteeism, they have a hard time making decisions at work and care for their patients. (Cocker & Joss, 2016; Rice & Warland, 2013; Berg et al. 2016)

3.3 Vicarious traumatization

The vicarious traumatization describes the harmful internal changes in a professionals view of others, themselves and the world, as a result of witnessing another person's

trauma. Vicarious traumatization develops gradually through recurring exposure to indirect trauma. It is a part of normal response to the challenges but it carries a cost for the professional. Vicarious traumatization can also be described as cumulative stress. This is when many seemingly small incidents develop into a so called crash leading to traumatization. An incident that normally would be easy to overcome gets the psychological well-being to shiver. Everyone has some resilience but not endlessly. Vicarious traumatization can be hard to recognize not only by others but also by the victim oneself. The symptoms of vicarious traumatization are mostly associated with cognitive changes, such as arousal, avoidance and intrusion. It is usually noticeable in the relation to whom the given service is provided, in this case the healthcare provider's relationship and approach towards the patient. Seeing things 'black and white' and generalizing is often a result of not managing or having the strength to variegate and be dedicative in the situation. It can also come out as a need of power, need of having power over the patient and getting her to do as one wants, not to be a 'difficult patient'. Racism can be a result of vicarious traumatization. Mental discomfort and illness has a significant impact on productivity and wellbeing and leads not only to absence but also to presenteeism, meaning working whilst unwell, not meeting expected standards. (Bovopoulos et. al. 2016; Sheen et. al 2014; Hedrenius& Johansson 2013; Baird &Kracen 2006; Wright et. al. 2017)

4. AIM AND RESEARCH QUESTION

The aim of this research is to investigate how midwives cope with crisis situations and their need of mental first aid. Are the used methods used for mental aid enough to maintain the midwives' ability to give good empathic care?

Through the results a suggestion on how to develop the mental first aid by the needs of the personnel is generated.

This study will clarify the coping methods midwives use to cope with crises they face at work and how the used coping methods influence their ability to give good and empathic care. Even though the study is conducted at a delivery ward the results can be used at any workplace where unexpected crisis situations occur.

The research questions are:

Which are the coping methods midwives use to cope with crises they face at work?

How do used coping strategies effect the midwives' ability to give good and empathic care?

5. RESEARCH METHODOLOGY

This empirical research is conducted using qualitative research methodology and the data is collected through interviews using critical incident technique, CIT. The data is analyzed by inductive content analysis. Qualitative content analysis is one of many ways to analyze data and interpret the meaning of it. The research method represents an objective and systematic mean of quantifying and describing the phenomena. The purpose is to draw realistic conclusions through organizing and obtaining meaning from the collected data. The design will be a combination of naturalistic and purposeful approach. It will answer the epistemological question of what can be learnt of this case. The focus will be on real-life situations as they unroll naturally. The non-controlling and non-manipulative approach gives space for whatever emerges through the interviews. The informants, consist of people that have information that brings illuminative information of the topic. The insight of the phenomenon is the aim that could be applied on a population, not to make a generalization. This study is based on real life situations and the informant's personal experience and feelings. (Berg et. al. 2012; Elo et.al 2014; Metsämuuronen, 2008; Bengtsson, 2016)

5.1 The collection of data

Data is gathered by interviewing midwives at the delivery ward individually, using critical incident technique, which allows the informant to freely share critical incidents they have experienced during their career. The focus is on if the midwives felt the used coping mechanisms were enough for them to carry on and give good compassionate care. The informants are selected so that all career ages are represented in order to represent the entirety from which it is chosen. The informants are contacted through email according to a given list by the head nurse of the delivery ward. The emails include the letter to the informants/ letter of consent (Appendix 1) and the research plan so that the informants can get familiar with the subject on beforehand. Interviews are held at a separate room at the hospital and are strictly confidential. The informants are chosen based on their free will to participate. (Bowling A, 2014; Metsämuuronen, 2008)

Before participating in the interview the informant is given a short description of the research and any questions about the research is answered. By participating in the interview the informant is giving her/his consent to use the given material. The informant has the right to withdraw at any time during the thesis writing process. The sensitive subject in this thesis requires deep ethical acknowledgment and sensitivity by the researcher. The thesis proposal is approved by the Arcada University of applied sciences and a study permit is given by the Hospital District of Helsinki and Uusimaa (appendix 2). The total length of the interview is about one hour. During the interview the informants' non-verbal reactions are observed and analyzed. In the end of the interview a conclusion discussion is held with the informant to ease possible stress reactions arising through the subject. Since the sensitive subject in this study has a probability to trigger traumatic memories and distress all the informants are given the opportunity for further discussion with the researcher at a separate occasion if needed. (Good Scientific Practice at Arcada; Degree Thesis; Somekh & Lewin 2005; Bowling A, 2014, Elo& Kyngäs 2008)

Interview language is Swedish, Finnish or English chosen by the informant. All interviews are recorded without names of the informant and then transcribed verbatim into text by the researcher. Participation is strictly anonymous and confidential. Gathered data will be stored in a safe place by the researcher. If needed pseudonyms will be used in the text. Quotations will be done in a protecting manner for the informants' identity. (Somekh & Lewin 2005; Bowling A, 2014; Elo& Kyngäs 2008; Bengtsson, 2016)

The aim is to have between 6 to 10 interviews using the critical incident technique. The precise number of informants is clear when saturation is reached. The point when saturation is reached is up to the researcher. This leaves a possibility for important information being lost if the interviews are not done accordingly. An interview structure is made to ensure that all interviews follow the same line and no information is lost (appendix 4). (Ostrom& Wilhelmsen 2012)

Interviews have been used by qualitative researchers as central source of data for many years. Studies relying entirely or primarily on interviews are becoming more common even though it does not always go uncriticized. The main perspective of qualitative

research interviewing is to generate personal meaning by getting first-person access. (Hammersley, 2013; Stelter, 2010; Metsämuuronen, 2008)

Through interviews a deeper sense of understanding the participant's experiences and interpretations may be acquired. Bodily and gendered experiences such as sweat is also included. When exploring in depth a significant experience and perspective of a selected group of people the researcher is given an explanation on why a person is behaving or reacting as they are. (Dowling, 2016; Hammersley, M. 2013)

5.1.1 Critical Incident Technique

The Critical Incident Technique, CIT was originally developed in 1930s and then further developed during World War II by Colonel John C. Flanagan. It is a qualitative approach and is especially useful for exploratory studies. It is flexible as a method and can easily be modified to meet the particular situation at hand. The purpose of CIT is to gather direct observation of the human behavior that have critical significance. (Ostrom & Wilhelmsson, 2012; Cisek, 2016)

The CIT is used in many different areas and can be applied in various of different researches. It is particularly well fitted for information behavioral research. The critical incident technique consists of a set of procedures that are used to systematically analyze and identify human behaviors of critical importance that contributes to failure or success in specific situations or contexts of individuals or organizations. The use of CIT is especially used to identify effective or ineffective behaviors in relation to a specific activity. (Cisek, 2016)

A critical incident is seen to be a single separable happening or event that has as significant influence on an activity, phenomenon or task and also has an influence on someone's attitude, achievements, success or failure. The critical incident does not have to be unusual or dramatic. (Cisek, 2016)

Critical incident is like all data, a created data. It is not something already made, waiting to be found. Critical incidents are made by the way the situation is seen. It is an

interpretation of the significance of the event. The decision to include something as a critical incident is to make a value judgement. The basis of that judgement is the significance attached to the meaning of the incident. (Cisek, 2016)

The five steps of CIT according to Urquhart et al. (2003) are

1. Determination of the aim of the activity
2. Development of specifications and plans for the collection of factual incidents of the activity
3. Data is collected through interviews and observation
4. Objective analysis of the data
5. Interpretation and report of the requirements, particular focus on those which make significant contribution to the activity

"Flanagan indicates that, for direct observation of behavior, observers should be familiar with the activity, the group whose behavior is being studied can be specified, and that the behaviors can be categorized, or some criteria developed" (Urquhart et al., 2003).

The participant is encouraged to tell their story by the critical incident technique. The technique is based on real-life experiences of the participants. The incidents are seen exactly as the participant has perceived them. Through this the true level of importance and meaning attached to them is set to be discovered. (Cisek, 2016)

Critical incidents are divided in to positive or negative depending on if they are considered effective and problem solving or ineffective, fail to solve the problem or leading to further problems or the need for further actions. (Cisek, 2016)

5.2 The data analysis

The gathered empirical data is transcribed and analyzed by inductive content analysis. Content analysis is a method of analyzing verbal, written or visual communication messages. The aim of using content analysis is to describe the phenomenon in a conceptual form by building a model. The model is built up from words and phrases

sharing the same meaning building up categories. As a research method content analysis is a systematic objective way of describing and quantifying a phenomenon. It allows the researcher to enhance the understanding of the data by testing theoretical issues. Content analysis is done either deductively or inductively. In both cases the analysis consists of three phases: preparation, organizing and reporting. (Berg et. al. 2012, Elo& Kyngäs 2008; Metsämuuronen, 2008)

In content analysis it is important for the researcher to be familiar with the context. However, the researcher needs to be aware of one's own knowledge and perceptions and not let it affect neither the process or the outcome. (Bengtsson, 2016)

Stages of content analysis

1. Getting to know the background and existing research
2. Making of theory (processing of thoughts)
3. Creating of harsh categories, first set of categorization
4. Clarification of the research aim and clarification of concepts
5. Detecting frequency and exceptions of phenomenon
6. Cross validation, testing the categories on the data
7. Conclusion and interpretation the results are moved to a broader review.

Stages of content analysis according to Metsämuuronen, 2008

The preparation phase consists of suitable data collection and preparing the data in a way that the analyzing according to the suitable method is possible. Whole interviews and observational protocols are most suitable units for content analysis when they are large enough to represent the whole, still being the size that the content can be kept in mind during the analysis process. The analysis can focus on the manifest content or the latent content meaning also focusing on the informants' reactions such as silence, laughter, posture et cetera. In this study the focus will be on both as the information gives deeper understanding of the matter. (Elo& Kyngäs 2008; Elo et. al. 2014; Bengtsson, 2016)

The questions kept in mind during the analyzing process according to Elo& Kyngäs (2008) are:

- Who is telling?
- Where is it happening?

- When did it happen?
- What is happening?
- Why?

In order to become immersed with the data, it is read through and in this research also listened to several times. The analyzing process is then conducted using an inductive approach. Latent content is written down during the interviews and analyzed along with the data. (Elo& Kyngäs 2008; Metsämuuronen, 2008; Bengtsson, 2016)

Inductive analysis means important themes, patterns and inter-relationships are gathered through immersion in the details and through exploring. The findings are then confirmed, guided by analytical principles rather than rules (Berg et. al., 2012; Elo& Kyngäs 2008). By weaving together, the new information developed through the collected data into conclusions, new theories are made (Bengtsson, 2016). Inductive content analysis is appropriate where there is fragmented or no previous studies about the phenomenon. Due to fragmented previous studies in the selected area in this research an inductive approach was chosen. The inductive content analysis moves from the specific towards the general in a way that allows particular instances to be observed and then combined in to larger whole statements (Elo& Kyngäs 2008). In order to identify meaningful subjects and answer the research question the researcher analyses the text with an open mind (Bengtsson, 2016).

The data is organized using open coding, creating abstractions resulting in categories which include the organization phase. The abstraction process in this research is carried out by reading the data as many times as needed creating subcategories containing similar events. Subcategories are then emerged into generic categories. Similar generic categories are then grouped into main categories. The categories need to be externally heterogeneous and internally homogeneous. This means that no data should fit into several groups or fall between the groups. A table of the process is made using excel to state the transparency and ensure the quality of the analysis (Bengtsson, 2016; Elo et. al. 2014). The purpose of the categories is to create a way of describing the phenomenon and that way generate knowledge and increase the understanding. Categories must be both empirically and conceptually grounded which makes the creation of categories empirically and

conceptually challenging. The created codes may change as the analyzing process progresses. In order to increase the reliability and stability the coding process should be done repeatedly starting from different parts of the data. (Elo& Kyngäs 2008; Elo et. al. 2014; Metsämuuronen, 2008; Bengtsson, 2016)

The reporting phase consist of describing the content of the categories using the selected approach. The researcher is required to be able to analyze and simplify the data and form categories that in a reliable manner reflect the subject, in order to achieve a successful content analysis. Credibility is dependent on how well the categories cover the data. The analyzing and reporting process needs to be described in such a way that the path of analysis is understandable by others, as well as its limitations and strengths. This shall include a dissection of the process and the validity of the results as well as a link between the results and the data. (Berg et. al. 2012; Elo& Kyngäs 2008; Elo et. al. 2014)

5.3 The usefulness and transferability of the research

Transferability refers on how well the results of the research may be applicable on other areas and groups. How generalizable the results are, depends on how representative the sample is (Bengtsson, 2016). Wright et. al. (2017) cross cultural literature review of midwives' methods of alleviating stress and increasing resilience shows that it is clear that regardless of location the work related stress amongst midwives is shared (Wright et. al. 2017).

5.4 Ethical discussion and trustworthiness

This research is based on good scientific guidelines and follows the responsible codes of research set out by the Finnish advisory board of research integrity (Varantola et. al. 2012). This thesis follows the good scientific guidelines set out by both Arcada and Diakonia University of Applied Sciences. This includes ethically sustainable data-collection which means amongst others that the informants are correctly informed of the

purpose of the research, their right to privacy is confirmed and they participation is based on their free will (Good Scientific Practice at Arcada; Degree Thesis; Diak 2012).

It will bound to honesty and transparency during the whole research process. The thesis will be going through the Urkund plagiarism check. The informants will be taken care of according to ethically sustainable data-collection principles. The researcher's personal experiences and preconceptions will not be let to influence the outcome of the research. (Good Scientific Practice at Arcada; Degree Thesis; Diak 2012; Bowling 2014)

This research is conducted using qualitative research methodology and the data is collected through interviews using critical incident technique and inductive analyzing. The researchers own work experience at a delivery ward gives insight and understanding if the area and therefore a connection between the researcher and the informants during the interview is easily established. All informants are contacted through email to minimize pressure to participate due to collegiality. Interviews are held at the hospital after or before the participants' shift at a neutral atmosphere protecting the participants' identity. All interviews are recorded without names of the informant and then transcribed verbatim into text by the researcher. Participation is strictly anonymous and confidential. Gathered data will be stored in a safe place by the researcher. Quotations are made such a way that the identity of the informant is protected. If needed pseudonyms will be used in the text. (Somekh & Lewin 2005; Elo&Kyngäs 2008)

The incidents reported in the interview might be recognized by other midwives and there is a chance informants talk about the same critical incidents. Unnecessary details of the critical incident will not be used in order to protect the anonymity of the informant. Since the aim of this research is to focus on the midwives' personal reactions to the incident and not the incident itself, there is no conflict in the case that the same incident is reported.

5.4.1 Trustworthiness

The aim of trustworthiness especially when using inductive content analysis, is to support the argument that the findings are what Elo et. al (2014) describes as "worth paying attention to". This because the categorization is created from raw data without a theory

based categorization matrix. The data given through the interviews will be analyzed by the researcher. When the data is analyzed and categorized by one single person it brings on a reliability issue. (Elo& Kyngäs 2008; Elo et. al 2014; Metsämuuronen, 2008)

The multiple meaning if the same words and different interpretations of the same context might lead to different outcome in the analysis of the data. When doing qualitative research, it is equally important for the measurement instrument, to be consistent in order to enable trusted analysis within different researchers using the same data. In order to do reliable analysis of the given data the researcher needs to be well knowledgeable in the subject area. The results are therefore dependent on insights, skills, analytical abilities and the style of the researcher. However, it is equally important for the researcher to not let own negative experiences and mindsets influence the study. In this study the researcher has ten years of working experience in the field and also a special training in mental first aid for colleagues along with continuing training in the area. (Elo& Kyngäs 2008; Elo et. al 2014; Campbell et. al. 2013; Metsämuuronen, 2008)

Metsämuuronen (2008) highlights the critical aspect of the informants' veracity. In qualitative research the trustworthiness of the data is not questioned in the same way as with quantitative data. However, this question should not be left unargued. Cultural and historical aspects of both the researcher and the informant might influence the answers a researcher is given as well as the analysis process. In this research however, the reliability of the informants can be held as strong since the data is collected based on free will, strict anonymity and incidents the informant choses to tell. The researcher's own educational level is also beneficial when reviewing the truthfulness. (Metsämuuronen, 2008)

The process of analysis and needs to be clearly described in order for the reader to follow the process and to achieve validity. The stages of the abstraction process need to be easily described. However, the researcher's intuitive actions and insights might be difficult to describe. (Elo et. al. 2014; Elo& Kyngäs 2008; Bengtsson, 2016)

In this research the researcher has both personal working experience as a midwife and special training on the subject. To prevent bias, the analysis of the data the researcher needs to be aware of possible own personal traumatic experiences. The critical incident

technique gives an opportunity to prevent bias as the informant is asked to tell their story or view of an experienced crisis situation as well as their coping methods. Therefore, the influence of the researcher's opinions and own personal experiences is minimized and 'over-participation' or 'over-interpretation' is avoided. A research review has been done to clarify earlier studies related to the subject and at the same time give a global overview of the subject. In case of doubt occurring during the research process the researcher has the opportunity to consult the research supervisors for advisement. This together has given the researcher deep knowledge in the subject which gives the study reliability. (Bowling, 2014; Elo& Kyngäs, 2008; Metsämuuronen, 2008; Elo et. al. 2014)

Midwives in Finland are trained to take care of normal deliveries on their own and high risk deliveries accompanied with the obstetrician when needed. Compared to midwifery work globally, midwives in Finland are highly independent in their work. When comparing researches made amongst midwives in other countries this is a fact needed to be considered (Sheen et. al., 2015)

6. RESULTS

The research question was centered on how midwives cope with the crisis situations they experience at work and how the used coping strategies affect their ability to give good and empathic care. A concept map with primary categorization, open coding (Elo &Kyngäs, 2008) was made (Figure 1) to visualize and get an understanding of the outlines of the phenomena (Metsämuuronen, 2008: Bengtsson, 2016). The primary categories where then combined into broader higher order categories using similarities and dissimilarities conceptualizing the empirical data (Elo& Kyngäs, 2008).

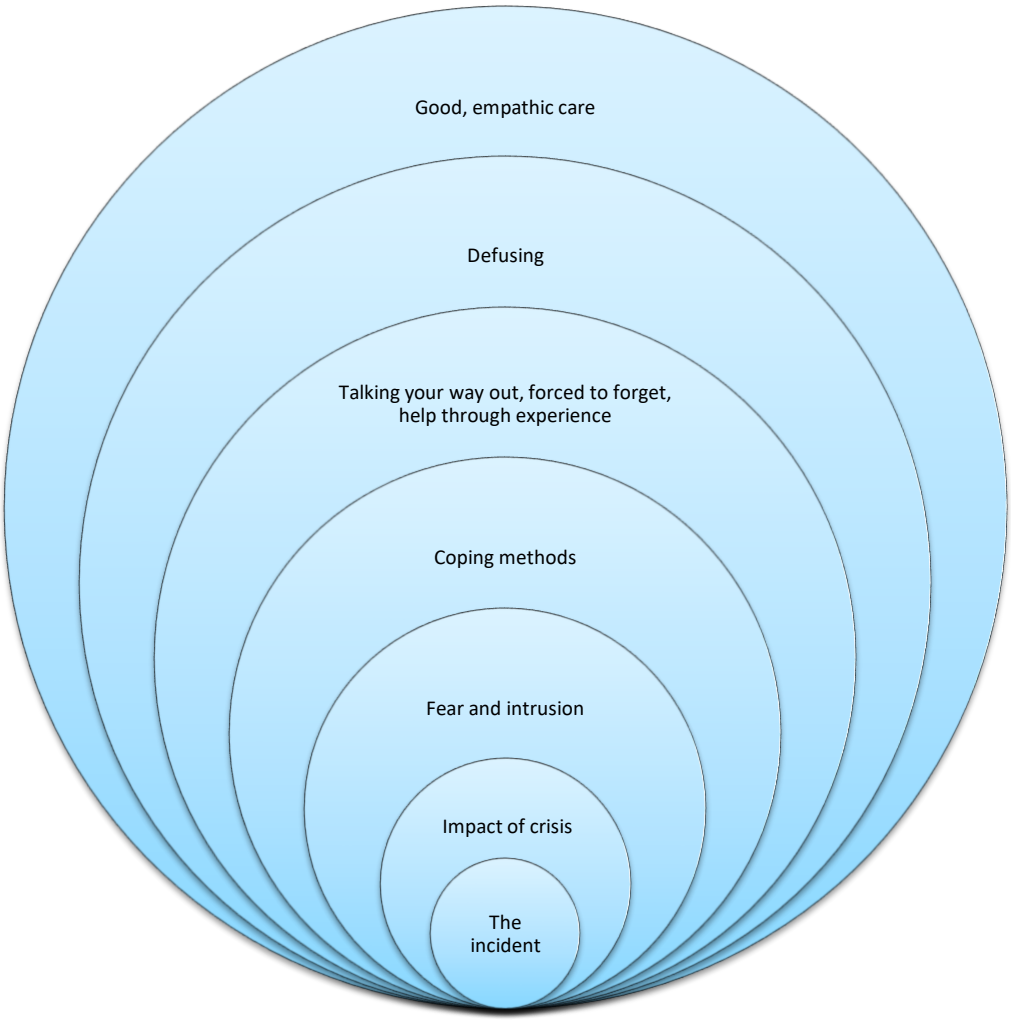

Figure 1. Concept map of the primary categorization based on the interviews

6.1 Presentation of the data

A total of eight interviews were conducted and resulted in 75 pages of transcribed data, with an average of 9 pages/interview. Ten invitations where sent out and eight midwives participated, all interviews were included. The mean age of the informants was 43,8 years ranging from 27 to 61 years of age. The informants had a total of 123 years of work experience within midwifery, with an average of 15,4 years, ranging from 1 to 36 years. All informants were currently working at a delivery ward. (Table 1)

The total length of the interview data was about 7,4 hours, the average length of the interviews was 56min. A number of 53 incidents where mentioned in the interviews, with a mean of 7 incidents/ interview. Some of the incident may relate to the same case. It is also possible that many critical incident categories were mentioned within one incident case, for example placental abruption and still birth. Every mentioned incident is counted only once as a whole since this research is focused mainly on the reactions and coping not the actual incidents. (Table 2)

6.1.1 Sudden unexpected incidents

The most commonly occurring incident was 'sudden unexpected incident' implying resuscitation or death of baby, III° and IV° tears, (pre-) eclampsia, placental abruption, hysterectomy or major bleeding and other confusing situations, stillbirths, death of mother and close call situations.

> *"I think about it at home…if it´s an unexpected sick baby or something like that, I think about how we handled the situation, what happened, why did it happen, why was the baby so sick or didn't I check the CTG, should I had consulted the obstetrician earlier..."*

> *"If the mother gets a third degree tear, naturally you think about it for a long time and you think 'Why did I do this, what did I do, why did I do it this way, could I´ve prevented this and would there have been another way?'"*

6.1.2 Organizational turnovers

Big turnovers in the organization was also mention as a critical incident in most interviews. This included things as rebuilding the hospital, major staff changes. Shortage of staff, unable to take breaks, high work load, stressed colleagues and excessive paperwork was mentioned.

“for me it was a big crisis when I was told I had to change hospital, it scared me very much”

“You get angry with the management when they move you around, new ones are taken in and old ones moved elsewhere”

"I get angry and aggressive, like I get angry with the hospital management for just throwing us around like nothing and the actual problem is not taken care of at all"

Occupational health

Also occupational health issues such as were mentioned as a critical incident. Some had contacted the occupational health but not gotten any response. Others felt the issue was not handled correctly by the management and therefore did not seek help even though they recognized the need.

"Many surely suffer by these things but do not have the strength to take care of this and make a fuzz about it"

Staff related

Staff related incidents refer to incident concerning lack of staff.

"...if you really have the time that you need with the patient then everything else is secondary”

"When there is a constant staff deficiency and there is no time to take care of the patients properly and you have to run between patients I feel annoyed and I notice that I get tired of the patients"

"There´s a lot that takes the energy away from the actual work. Younger midwives also talk about how worried they are about how they´ll manage this work in the long term."

But also slanderous behavior, distrust amongst colleagues or other members of the staff was frequently mentioned.

"It was clear they it was me they talked about. That was something I contemplated for weeks afterwards. When I´ve talked about it with younger colleagues I´ve noticed that surprisingly many have the same kind of experience."

"I get really upset about those situations where I notice that another midwife is doing something wrong. Treats the mother badly, is mean, conducts malpractice that's a crisis for me."

Most of the informants had never participated in the mental first aid group provided by the hospital. Some had participated in group discussions held by the management team but this did not follow the guidelines of defusing process. Also private discussions with members of the management team or the head nurse had been used after a critical incident. Mostly then by initiative of the midwife experiencing the incident. Some informants had experience also of defusing sessions held by skilled professionals. A few had experienced both official defusing and discussion with management.

6.2 The impact of crisis

During the interviews the informants talked about a total of 53 critical incidents they had experienced. During the interview many experienced emotional turmoil. Shivers, trembling voice, staring eyes and crying was intimately present. Many had a lot of incidents on their minds and some had never talked about them with anyone before.
Many said that they were not influenced by the incidents but their reactions tell of something else.

6.2.1 Fear

Fear was the most mentioned reaction. Fear of what had happened, fear of making a mistake were common as well as fear of not being able to handle the case. Fear is also closely related to self-blame, questioning one's own and others doings as well as the event as a whole. Fear of litigation and media was also mentioned several times and lead to defensive practice and over estimation which undermines the midwife's confidence.

<u>What did I do?</u>
Self-blame and self-questioning even years after the incident was very common. Self-blame was even in some cases seen as a way of punishing oneself for the doings and therefore giving justice to the patient.

"I cried and thought, and blamed myself because I did wrong…as I usually blame when something happens"

"I feel bad for others, and myself if a mistake has been done and I know you blame yourself for it. In the beginning you do it more and maybe later it comes as flashbacks in different situations. You are ashamed, did I really do that!? Couldn´t I do better, did I forget such a thing!!"

"This is something that I remember myself struggling with. I struggled for a long time with the thought of, how could I do that "

*"I blame myself for not going to meet… (*meet a relative*), for choosing the easier way… I´ve never admitted this to anyone."*

Even though the midwife could reason herself to the knowledge that it was not her fault the self-blame was still there as a constant heavy load.

" I regret it even this day that I wasn´t oriented enough to know in such incidents"

"I do feel guilty and I don´t think I´ll ever get completely over it because I can´t change…It won't go away by apologizing"

"I feel guilty all the time, I blame myself because…because I..."

Also questioning related to the crisis was extremely common. The questioning of one's own actions and the consequences was evident.

"…and then I got scared…I called a member of the management and started crying. I yelled and cried on the phone, have I killed that woman, is it my fault? And that was…that was…when it hit me emotionally too"

"I just thought that, could this have been prevented."

"I think a lot of situations like, 'oh I said it so harshly, I could´ve said it more nicely. Or why did she say it so rudely to me. I could´ve done it better, act more smoothly, why did I cause this anxiety to that person when it´s already a busy situation... "

<u>What is next?</u>

Fear of the future came up several times. The fear of still having to face something even more horrible than the already experienced ones was evident. The most feared incident was something never heard of before, something not yet known or experienced by anyone. Also pressure and stress at work, the fatigue amongst colleagues causes fear.

"I believe that even ten years from now there can be something enormously dreadful. I´m aware of that all the time. It can be today, tomorrow or three years from now"

"I´m afraid of what comes next…the worst case ever where I´m not able to do anything."

"I´m afraid of those situations that I haven´t had yet... ...because you can´t read about them in a book, it's so different when you´re actually there"

Trauma memories and flashbacks when confronting similar cases was frequently mentioned.

"Always in these cases sort of go back to the earlier one, what happened then, is there any similarities now, could this have been prevented, is this helping me in processing the old incident or help me confront this new person, maybe not. Would I have acted differently in this case if I hadn´t had the earlier one burdening me?"

"this shouldn´t happened here, they shouldn't die here that's not common, they are not supposed to die. Of course I think a lot about it, of course. The same thoughts come back as during the first time. I think about the father, with a small baby. It's not so much professional thoughts more in a humane way, how others fate touches you"

"It does come back to me. Maybe not in every similar case but it always keeps me on my toes in similar cases."

The fear of malpractice and litigation was frequently mentioned. As well as fear of being confronted with similar incidents as their colleagues yet not experienced by themselves.

"because of others bad experiences I put extra efforts in my writing"

"I contemplate my writings a lot. I think about how and what I write just in case someone wants to press charges afterwards."

"I am scared every now and then. There are periods when I am scared. I´m afraid of making mistakes, some difficult case or difficult patient..."

They way midwives talk about their job and cope with their own stressors affects their colleagues significantly

"I'm worried because I can see that those who´ve done this job 15-25 years are quite exhausted"

"surprisingly many has resigned and it tells something about the situation. Of course I get nervous how I will manage this job."

"You can see some colleagues becoming apathetic and numb. They talk about work in a negative way, you hear a lot of negative talk at work"

"I'm worried that even the more experienced will get exhausted, our work load is increasing and you hear even more negative talk about this work"

But the fears can also ease through patient contact or trough knowledge.

"A certain anxiety, or not anxiety but fear of what kind of patient do get next, what if it´s this or that. It goes away and eases, especially when I meet the patient."

"sometimes when you're told that you´ll get a really terrible case and when you actually meet the patient you see that she´s a human being and not all those diagnoses. When you´re there the fear goes away. Of course you´re scared of the unknown."

"but you can´t do this work if you are afraid…afraid that something will happen…or something…this was just one thing and here we continue from this."

What if?

What if it would happen to me, my child or my loved one. What if it would happen in my hands? These are questions that came up.

"Could this happen to me, what if it would be my child. I guess I´m not the only one who goes home and hugs my child so hard and I´m just so overwhelmingly happy that I have a living child that´s healthy"

"it hit me that it could´ve happened in my hands"

Stigmatization

The fear of being stigmatized by colleagues and also the organization is frequently mentioned in the interviews. Many said they fear to be seen as week or un competent if they would speak out about their reactions.

"For me it is very difficult to say that we need to have a discussion. It would probably become a big deal out of it or something…."

"I knew we had a defusing team, the number was there on the wall. But it felt so silly… … I just felt that what should I say to her, that I had this case and oh it was so... "

" I think it´s good that my colleagues come to me to discuss, that means I can unload my burdens on them too. I think it is nice to hear and see that…"

6.2.2 Intrusion

Some are surprised by their own reactions during the interview. Many thought they were not suffering anymore but once they started talking the emotions came back and they reacted by crying, shivering, staring and reliving. Some clearly suffer of intrusion, through flashbacks, nightmares and avoidance. This came up 41times in the interviews.

"I have bad dreams that I forgot something. They are most often nightmares. They are usually related to me not knowing or I left something un noticed."

"For me things easily come into my dreams. Sometimes it is much later"

"It does come back to me. Maybe not in every similar case bot it always keeps me on my toes in similar cases."

Avoidance came up in many ways as a way of coping with something otherwise too difficult to handle on oneself

"I acted selfishly to protect myself from being in that situation again by avoiding."

"I did not meet the father during that day at all and that troubled me afterwards…. I think I avoided to confront him"

"I protected myself by not appointing certain cases to my colleague who was involved in that incident"

Defensive practice and over caring also came up in the interviews. Many mentioned that the earlier incident came in to their mind whenever a similar case occurred. Some actively avoided similar cases even years after the incident.

"Every time someone says she´s bleeding this incident comes back to me. And I think about them afterwards. In some way they scare me. Not only in a bad way but especially those calls when I don't ask them to come in I get anxious. Because if they come in, then you know what the situation is and I can read about it later that everything was fine. But if they stay at home, I guess everything is fine...but until I know...I think I ask them to come in more easily because of my past incidents"

Some had very clear memories of the experienced incidents. They remembered exact words, smells and sounds from the incidents. Many experienced a feeling as if it was yesterday.

"It was about…at least…. (counting days) …well anyway in the beginning I was completely…. for the first 3 days it didn´t touch me at all and I was wondering that what is this…And then…I had never experienced something like this before…. But it´s so clearly stuck in to my mind...I still remember that blood pressure gauges how it fell...like in slow motion, all those moments.... everything people said and how they acted, everything is stuck in my mind"

6.3 Coping methods

All informants felt that they have some kind of coping mechanism that they use following a crisis. However, most of the informants felt it was a self learnt system. Some learnt how to cope by listening to colleague's ways of coping others learnt their own ways as their career passed on. Most of the informants felt they had not been thought in school how to face the critical incidents encountered at work.

6.3.1 Talking your way out

The most commonly mentioned way of coping was through discussion, which was mentioned 64 times in the interviews.

Discussion with colleagues

The best way to get the stressful and burdening thoughts out was through discussion with colleagues. Colleagues that intervened and recognized the need to talk and also in some cases referred to discussion with the head nurse was mentioned several times in the interviews.

"This was like we discussed it a lot and I felt that it was a good thing"

"one thing that I have noticed in all these things (critical incidents) that we have had is that it is always the discussions, I mean the ones with *colleagues, when you get to talk through, they are helping. And also the smaller things are discussed in some way at some point with the same people"*

"It would have left me feeling really bad, and I would´ve felt completely alone if everyone would´ve just ben there but not said anything or interfered. It helped me a lot to get the opportunity to discuss it with someone immediately"

"we discuss these incidents openly in our work community. Which is good. I think it´s quite typical of us midwives that we quite openly share our personal lives. It´s an incredible recourse. This work can´t be done without the colleagues."

"I think it was really good that the work community intervened and after all nobody was blamed"

But only a few felt comfortable to discuss without concealment. Many mentioned that they have a few chosen colleagues that they confide to and that they need the right moment to be able to speak out.

"I talk, I talk a lot. But now as I´ve gotten many new colleagues the threshold to talk is.... maybe, if I would know everyone a bit better and longer and they would know me…I feel I´m on uncertain grounds here so I don´t feel I´m getting the same kind of support...of course there are some that I can talk to."

"It depends on who´s working that shift. If there´s no one during that shift that I feel like talking to then I´ll just hang on, try to survive that shift. And tell a friend or someone that I had a horrible case at work today and I feel really bad. Or then the next time I come back to work...but by then the worst is probably over so."

"we discussed it yes, briefly, a colleague told me in the beginning of my shift, it was a night shift, there was only a few of us there. She told me and I started crying and then we discussed the incident. The situation was such that I could cry, there was such colleagues who I felt I could cry with. The emotions won't come if there are people you don´t know and feel comfortable with"

Also the atmosphere as well as the culture at the ward influenced on when and if they dared to speak up or not.

"People (midwives) go home with such big burdens. Because we have never been thought, people need to be thought that you are allowed to have these feelings. It is allowed to also be week. Maybe that's still our culture that 'as a midwife you should never'...maybe it also depends on who is on that shift also...the amount of empathy and so. Not everyone wants to show everything..."

"lately when there has been a lot less sense of community…earlier we had a set of sofas where it was easier to share and process these incidents, back then the work community was stronger also. Now there are such big turmoil's, hopefully we achieve that again at some point"

"It was probably because of the culture at that point, no one realized how important it is to discuss the incident when it happened"

"I had a big need to talk about that incident, to share my feelings when I came out of that room. But when there was no support. It was a big difference. Work communities can be very different."

The years of experience influenced on who they were comfortable to talk with. There is threshold to show your vulnerability to colleagues of different occupational way. This was evident in both ways. The ones with more experience felt uneased to discuss their own emotions and reactions with younger ones and vice versa.

"I remember that the best support was from colleagues, and mainly colleagues with the same years of experience. And then a few older colleagues."

<u>Discussion with the management</u>

Also discussion with members of the hospital management team or the head nurse was used.

"have thought about that…and I think that maybe the fact that it was discussed in the end…and quite well in fact… I talked with the management team and I went it through it so thoroughly. But if I hadn´t contacted the management...if it had been left untreated I think it could have disabled me more and affect me in the future. I got it well discussed...but I did that because I contacted the management myself…

"Then I talked to our head nurse, encouraged by a colleague, even though I didn't think it would be of any help or benefit. But then again I felt so much better and the head nurse really listened to me. Of course I didn´t get any solutions or anything but I got to unload my feelings and thoughts"

Some felt the discussion with the superiors helped them in processing the incident and others felt that they were not of any use or even harmful and more distressing.

“This didn´t meet my expectations about a defusing situation at all, and it was supposed to be one. I left it mostly angry. If this is how defusing’s are then I´m not participating ever again ever"

"I got the strong feeling that do I dare to say anything at all here and ok I clearly wasn´t given a possibility to speak either so I´ll be quiet then. If the aim of this was to…I felt that they just wanted to sort out, it was more of an interrogation. It was not a defusing, defusing is a completely different thing"

Discussion with friends and family

Discussion with friends and family was also very common but many also felt that they did not get the support they needed. They felt their family members did not understand how emotionally heavy and stressful midwifery work can be.

"Friends don´t understand how tough this work is. And what big responsibility midwives has. They don’t understand the emotional exhaustion. When you go home you’re not capable to give absolutely anything and they don´t understand that."

"I have people outside work with whom I´m able to discuss critical incidents, within the lines of patient confidentiality of course.

The need to discuss

Many mentioned they had experiences that they needed to discuss several times. Many said they referred back to a certain incident over and over again with a colleague as a way of getting it out of their mind.

"they need to be dealt with, those things that bother you. There have been cases that I´ve discussed, pondered and wondered about with a colleague over and over again for a long time and then again asked if we can discuss it a bit more"

Even though discussion was held to be the best way to cope none of the informants felt it was enough. All of the informants felt that there is a need for better mental first aid.

"here it is rally easy to discuss things with other midwives…so you don´t have to like…we have taken good care of each other here… but still I feel we need something more than just our work colleagues for this"

"The more experience a midwife has the more tools she has gotten during the years to deal with these. But still depending on the person I still feel there is a need for deeper mental aid."

Clinical supervision

Clinical supervision was used in some cases and the experiences of its usefulness was divided.

> *"It was group clinical supervision but she was not specialized in midwifery work. It was not purposeful for this line of work."*

> *"Clinical supervision would be really needed for all those small but still burdening incidents"*

It is also important that the group feels comfortable sharing delicate information with each other in order for the clinical supervision to work purposefully

> *"I´ve never participated but if I would, the other group members would be significant to me"*

6.3.2 Forced to forget

Forcing oneself to forget, not thinking about it and waiting for time to heal. These are the second most mentioned way of coping with a critical incident, as it was mentioned a total of 42 times in the interviews. Some recognized this being a cultural thing amongst midwives and maybe as a remnant of the years of war and harsh conditions were there has not been any room for mental reflection.

> *"I think it is because of our history, that´s where it all begins. The harsh conditions where the generations before us have struggled for their lives so they haven´t had resources for anything like this. But now in a way we have come to such a phase in our society that we can also think about this kind of mental well-being in a greater extent*

Many felt the critical incidents were a part of the job and therefore you just have to take them as they come.

> *"I haven't thought these things through, I´ve just went past them, moved them in front of me, forgotten them."*

> *"This line of work is such that you just have to accept…that you are forced to acknowledge that it comes with crises."*

> *"The atmosphere is quite tough, a kind of attitude that you have to stand these things as a midwife. You meet that a lot. I might think like that myself that I have to endure, you can´t let everything go under your skin and wonder about everything."*

Also the culture and atmosphere has great influence on how midwives cope with crisis. Many felt pressured by the prevailing culture to endure, not talk about their reactions.

"I feel there's a strong…a really strong atmosphere of enduring, you need to be…you have to just take it and forget. I´ve been told so many times that you´re supposed to forget, you have to forget the names, the cases…'I don´t remember you see because I´m so' … you hear a lot of that sort of things. I´m not saying that everyone generates such an atmosphere or pressure but...you still hear really often colleagues say such things...that you´re supposed to forget, you have to forget, you´re not supposed to ponder about such things, don´t contemplate. But it is so much easier said than done."

"I feel that it´s expected of me that I´m able to tolerate…a lot. Yes, that´s how I feel.

"that's our culture, you have to be able to deal with these things. You are taught that from the very beginning"

The fact that there is not enough time for mental aid before the next patient needs you is another reason for hiding one's reactions and needs after an incident.

"Quite a lot I contemplate these incidents on my own. Thankfully they… most of them pass out of mind because there's always new cases and you can´t be left contemplating all of them. Sometimes you just have to be nice to yourself that you´ve done your best."

"usually if we only have time we discuss it briefly, but sometimes there just isn´t the time for it. You get another patient and then you are just forced to push it aside"

6.3.3 Help through experience

Experience and knowledge helped the midwives to cope This was mentioned 32 times by the informants. The more experience and knowledge the easier many felt it was to cope with the incidents. Through experience they felt they had more knowledge. At the same time many felt angry and disappointed at themselves and the system for not having enough knowledge both to handle the incident but also on how and where to seek help. Many of the incidents described as the worst case ever was incidents experienced for the first time.

"experience brings security. I´ve seen and experienced so much and always moved forward, always survived, there is no case that we couldn't work out"

Experience gives comfort and trust in oneself and the team.

"I´ve come to that point in my career that I dare to admit my mistakes, or like in the beginning I could admit all the mistakes but then at some point it was like I shouldn't do mistakes anymore and only dared to admit them to the closest colleagues, that I almost did this. Later I´ve noticed that everyone makes

mistakes all the time and we can discuss them and we should be able to discuss them. But lately the atmosphere hasn´t been such that you easily could do that, because we don´t know each other that well"

Faith in that experience will at some point help to cope.

"I often feel that I wish I could be more like…less emotional at this work. That they (the incidents) wouldn't get under my skin so much. That I could be empathic but still keep a distance. I guess I´ll learn that by time. I guess you learn a certain, a sort of healthy way to deal, when you get more experience and more incidents. The first one is certainly the worst"

"I have nightmares of my patient not peeing for 10h and her bladder explodes, or that I forgot the mother for hours. They are usually related to me not doing something or forgetting something. Or then I wake up in the middle of the night thinking that I´m naked at work, and I wake up cold and sweaty, naked in the middle of the delivery room. I don´t know if anybody else has these nightmares. Maybe they will go away as I get more experience"

Experience helps to achieve a distance.

"In some ways you get used to it, you get used as you get more experience you´ve cared for many similar cases. Then you take a bit more distance, or you don´t get used to it but you adapt."

Good experiences in all its sadness gives power to cope and strength to carry on.

"I remember the feeling, it was so sad but the fact that I was able to be there when they took farewell of their baby. I had time to be there with them and we took footprints and…and I was able to be there even though they cried, I didn´t say anything but I was able to be there, that was an empowering experience for me. After that I haven´t been afraid, before that I thought that I´ll never be able to do that. I think some kind of professional growth is attached to those moments."

"Experience teaches you. It is wonderful to notice that I could do it, I was able to be there for that family, I was brave enough. Because you need to dare to be there."

"In the beginning I was afraid of everything, coming to work, doing an episiotomy, assisting the physician. But now when I´ve experienced those situations they don´t feel so bad anymore and I´m not afraid anymore"

6.4 Need of defusing

The need of defusing was mentioned 44 times. However, the use of defusing has not become a routine. Many lacked information on when and how to use this help. Others felt they were not entitled to their reactions and therefore did not seek help.

"I don´t know but maybe I would´ve gotten some answers there so I would understand this a bit better, so wouldn´t have to guess what happened"

"It would be great if it would be possible to sit down and just discuss after such incidents. Just talk about all the emotions it brought up. Because you can´t always discuss your personal issues during work hours. Your emotions are always related to your personal issues and past. And there might be a lot of such things"

" it was clear that we didn't have to discuss it further (with the parents) …but the rest of us, doctors as well, that where there in that situation was clearly bothered "

"that's how these things can be prevented, if it is possible to deal with the incidents, you don´t have to 'toughen up' yourself or hide or force it aside. If you do that it can rise up later and haunt you until it is dealt with" [has this happened to you?]: "No not too much at least"

"in all kinds of difficult situations it would bring some kind of ease. Even if the outcome was as negative as ever, it would be better to know what happened. Not to be left with loose stories and such. Of course it is possible that it would burden even more. I don´t know in what form but at least those 'meetings' are quite awful where all your written texts are shown to everyone and they are all staring at what I´ve written about the patient and look condemning at me. Not that kind of meetings but some kind of ending to the whole story"

In cases where the colleagues did not intervene or talk about the incident some felt it would have been easier if a defusing session would have been arranged instead of being left alone.

"especially when the work colleagues didn´t talk about it. Everyone just went on like…I felt like everyone just looked at me but no one said anything. Everyone avoided me in some way."

Rankin the incidents seemed to be a common reason for not seeking help. Some felt they were not able to self-assess if their experience was 'bad enough' for seeking help even though the incident clearly burdens them during the interview. Still most of the informants recognized the need of a defusing within themselves and they felt it would have helped them if it would have been used.

"it can be that people don´t even recognize their need of mental-help in themselves or how these affect if you don't deal with them properly. They can also diminish it and think that maybe this is not that important there´s no need..."

"Maybe there is a threshold, something really severe needs to happen. But of course there are lots of critical incidents that you are left thinking about without the thought of needing psychological aid."

"They all burden me in some way. These are the bigger ones. Maybe the bigger once are in some way easier to deal with. They are more clear and substantial to everyone. If I tell you that a baby died today you would clearly agree that it is awful and ask how do I feel. But then again those smaller things, those daily things that... maybe those are the ones that burden the most, or at least differently. They weigh

more heavily on your shoulders. Maybe someone else wouldn't understand in the same way. But when a baby dies it is evident that it feels horrible"

6.4.1 In the best of all worlds

In the best of all world the use of defusing would be easy and possible. In the interviews many expressed their distrust for it to actually be possible to organize a defusing session when needed. Many felt it would be a punishment for the other colleagues who would have to do their work during the time of a defusing session.

"for me it is really hard to understand how, if a midwife is at work and there is a shortage of staff anyway, it will be possible to be a way for a while to deal with a critical incident"

"somehow it should be permitted to have defusing during a shift or immediately after. I don't know if that will ever work. I don't know ..."

"maybe the threshold is too big to use defusing, I think it's more of something like that. We should get more information about it so that it would be easier to ask for"

"If you stay after your shift (for defusing) then you have to change your other plans. Not everyone can do that"

"you should be able to handle these things during your shift"

7. CONCLUSION OF RESULTS

In the conclusion the consideration on how the findings are corresponding to the literature and if the results are reasonable and logical or not (Bengtsson, 2016)

When discussing a crisis, it is important to keep in mind that it is about a healthy minds normal reaction to the incident. To react on a crisis is not a sickness nor disease and therefore should not be treated as such. Even though the reactions can be frightening, fierce and unfamiliar and appear even long after the incident. Trauma and crisis is a fact of life that can be dealt with, with the right kind of support, guidance and response. The way trauma and crisis is handled by the community, society and the individual has a great influence on the quality of life. In order to achieve functional and purposeful coping mechanism the individual and the community needs to have understanding of the natural and therefore also primitive happenings in a person when a crisis occur (Palosaari, 2008; Levine, 1997)

Many of the informants in this research had experience of discussions with the hospital management team or the head nurse. None of these discussions followed steps of defusing. Some felt they were beneficial whereas others even felt they were more of harm. This shows the need of discussion and getting clarity of what happened but if the atmosphere is not right it can instead be of more harm. If the persons in a crisis feels pressured during the discussion it is of no help. Not everyone is able to spontaneously discuss their experiences. (Hammarlund, 2001).

The aim of defusing is to bring back the connection of the cognitive and emotional connection. Hammarlund (2001) calls this the connection of the heart and the brain. Therefore, defusing is more of helping the participants to understand the incident than to unload their feelings (Hammarlund, 2001). The integrity is restored if there is a possibility for a uniting conversation. An empathic conversation with respect and enough time brings fragmented thoughts, experiences and emotions together. (Hammarlund, 2001).

If the affected is psychologically strong, trained and has experience of similar events that are already integrated the reaction of a crisis is reduced. (Hammarlund, 2001)

The one who is in crisis must have the opportunity to get company and not be left alone (Hammarlund, 2001) The workplace culture has a significant impact on the midwives' perception of empowerment (Hildingsson et. al. 2016).

Midwifery is generally seen as a joyful and fortunate job. It is regarded as a privilege. This can lead to difficulties for midwives to express work related stress (Wright et. al. 2017). Help seeking can be held back because of the fear of stigmatization, lack of recognition and discrimination which also came up in the interviews. Workers might feel the fear of being treated differently by supervisors and co-workers. It can also lead to groupings of 'we who experienced' the incident and those who did not and therefore cannot understand what we are going through. The ones who were not involved might feel left aside even though they might suffer on behalf of their colleagues (Dyregrov, 2002; Hedrenius& Johansson, 2013). It is therefore important to inform all staff of the incident in order to achieve an accepting atmosphere within the work place. It is common to have an increased need of talking over and over again about the incident and that is also a part of the healing process and should be made possible. In severe crisis cases the need to inform the workers family should also be considered in order for the family to understand their loved one's reactions and need of help. (Bovopoulos et. al., 2016; Hedrenius& Johansson, 2013; Dyregrov, 2002)

Rice &Warlands (2013) study of Midwives experiences of traumatic births, midwives felt debriefing with colleagues, friends and family offered them help after a traumatic birth. They also felt they could learn from their experiences and improve their work by analysis and reflection. In Rice& Warlands study it also became clear that some participants felt stuck with their feelings and had difficulties moving on. They also felt disregarded and dismissed by their colleagues after the event. The recognition of this study was that the support from colleagues as well as debriefing and counselling would ease the experience of secondary traumatic stress and vicarious traumatization. (Rice &Warland, 2013)

Good leadership is of great importance when it comes to professionals coping with crisis. A good leader is responsive to the personnel's reactions when a critical event has occurred. The head nurse has a fundamental role in how the working environment is assessed in relation to job satisfaction and sense of ability to provide good care

(Hildingsson et. al. 2016). Healthcare personnel are somewhat protected by their professional identity, education, training and experiences. Good preparation and education results in what Dyregrov (2002) calls a "stress vaccination" before the critical incident even happened. The emphasis should however not only be on education and knowledge since it individualizes the problem. A more systematic approach recognizing and addressing workplace stressors would be beyond the control of the individual. This is an important aspect and also comes up in the interviews as midwives expressed not knowing if their experience is considered 'bad enough' for help seeking and therefore did not speak up about their malaise. (Hedrenius& Johansson 2013; Dyregrov 2002; Leinweber &Rowe, 2010; Baird &Krace, 2006; Sheen et. al., 2016b; Hildingsson et. al., 2016)

Special attention needs to be given to workers in the beginning of their career especially since the first incidents generally triggers the strongest reactions. One way this could be avoided is by reducing people working with especially burdensome incidents. As well as working in pairs and ensuring the well-being of the staff especially in the long term. By openly evaluating the incident among the staff and learning from it is especially important in cases where the previous plans were not enough. (Hedrenius& Johansson 2013; Dyregrov 2002)

Hunter & Warren (2014) found mood changers amongst midwives to be used as a coping method. Midwives reported being able to 'switch off' and leaving work related thoughts at work and go home. They mentioned using calming activities such as walks with their dogs, music, warm baths, exercise and outside activities but also alcohol use as methods for mood changing. (Hunter & Warren 2014)

To enhance the resilience and improve and implement good coping strategies the workplace culture and practice needs to actively enhance the opportunities for this to be possible. This can be done by providing opportunities for peer support and nurturing relationships by improving the workplace culture and promoting optimism. Work place mentorship and reciprocal peer support is not only beneficial for the recipient but also enhances resilience in the provider (Hunter & Warren 2014). Clinical supervision helps

to develop interpersonal skills as well as necessary coping strategies for managing the emotions (Halperin et. al. 2011)

Wright et. al. (2017) mentions venting, self- distraction, positive reframing and planning for future birth encounters as coping strategies after a critical event. Mindfulness- based stress reduction course over eight weeks was also mentioned as a method for coping with a crisis and reduce stress. Wright et. al. (2017) however, determines that there is a significant gap in knowledge concerning which interventions improves resilience and alleviate stress in a midwifery cohort.

Hedrenius & Johansson (2013) lists ways to cope with crisis situations according to National Child traumatic Stress Network and National Center for PTSD:

- Take time and be kind to yourself
- You do not have to talk to everyone about your experience. Talk to those you feel confident with
- Do things that makes you feel good, eat good food, take a walk etc.
- Plan time for only you
- Let others be there for you and receive the help others offer
- Let go of your responsibilities, stop being an 'expert'

Also Palosaari (2008) lists similar things as coping mechanisms. The feeling of spoiling oneself with good food or other relaxing and enjoyable activities is a common way of coping. However, if the need of closeness to a family member or child is the first thing coming into one's mind there is a place for self-reflection. It is not preferable to use family members as self-treatment and coping. Reactions related to ones chosen profession should be treated and gone through at the workplace amongst other professionals and with well-known methods. Ones work related stress reactions should not be noticeable at home. A mandatory day of reflection, normalization and self-care after a crisis incident would be a good way for enhancing and maintaining good psychological health and work ability. This off course requires the willingness and economical possibility given by the workplace itself and therefore is quite unlikely. (Palosaari 2008)

8. DISCUSSION ABOUT RESULTS AND METHOD

The research review of this thesis shows the global aspects of how crisis contributes and causes psychological illness and presenteeism amongst midwives regardless of culture. The fact that midwifery is a highly stressful and mentally burdening job needs not only to be recognized but preventing actions needs to be established. Pezaro et. al. (2016) as well as the midwives in this research witness the fact that midwives do recognize their own mental state and the influence of critical incidents but yet they just carry on working with a smile on their face even though they are crying inside.

The incidents mentioned in the interviews were found to be much similar to incidents mentioned by midwifes in earlier studies such as in Sheen et. al. (2016b) and Wahlberg et.al. (2017). Many felt that incidents related to the mother or the baby was more acceptable to feel sad and anxious about than incidents related to the organization and therefore felt more left alone with organizational incidents. Hunter& Warren (2014) and Pezaro et. al. (2016) also mentions workplace conditions creating stressful situations amongst midwives.

Stress caused by unpaid work, workplace bullying and pressure to report to work when ill is reported both in the interviews as well as in literature. Also the poor access to education and lack of promotional opportunities result in lack of enjoyment of the work and lead to negative changes in the professional identity. (Hunter & Warren, 2014; Hildigsson et. al. 2016; Wright et. al., 2017; Sheen et. al.2014; Pezaro et. al. 2016).

Fear associated with midwifery was frequently noticed during the interviews. Fear of malpractice fear of mistakes and fear being blamed was common. But also the fear of exploitation in media as well as fear litigation was mentioned several times. Delivery care is known to be an area where complaints and litigation procedures are common. This leads to fear not only within the midwives but also the whole organization (Wahlberg et. al 2017: Leinweber et. al.2017b; Hildingsson et. al. 2016). Some midwives had even experienced being blamed by their colleagues and other members of the staff. Fear can at its worst lead to a blaming culture within the workplace. Therefore, the fear of doing a

mistake easily leads to over caring, medicalization and over estimation. (Sheen et. al. 2016b; Hildingsson et. al. 2016; Wright et. al. 2017; Leinweber et. al. 2017b).

Fear has a strong sense of cognitive factor. Our earlier experiences tell us what we need to be afraid of. After a crisis our minds can be triggered by similarities of that crisis. Others experiences and incidents heard of can also cause fear and anxiety and influence the way midwives see their job. (Hedrenius& Johansson, 2013)

Self-blame and questioning the outcome seems to be utterly common amongst midwives. Sheen et. al. (2016b) as well as Rice and Warland (2013) have similar findings. The investigatory procedures following a critical incident may have its place in finding out the cause of the incident as well as an educational purpose. However, if not done in a professional and respectful manner it may lead to further traumatization for the midwife (Sheen et. al 2016b).

The fear of the unknown, of what is set in front when starting a new shift was mentioned in the interviews. Many felt they already had experienced the worst ever possible but still mentioned a fear of what is next. Also Dyregrov (2002) mentions the fear of something even more horrific as something many experience after a crisis. But on the other hand some felt eased by the knowledge that the possibility of facing something as horrible during their remaining career was unlikely.

Some of the informants showed clear symptoms of what Dyregrov (2002) explains as ’flashbulb memories’ when every sense is intensified and particular details are memorized very clearly. This is an adaptive reaction as the brain ensures all information available is gathered and memorized in case something similar would happen again. Levine (1997) explains this as the ’felt sense’ which is a physical experience of a mental happening. A sort of bodily awareness of an event (Dyregrov, 2002; Levine, 1997)

The used coping methods help midwives to carry on working, it is a way of surviving, struggling. But the coping methods are not enough from any point of view. Structures for mental first aid and clear pathways of its use needs to be implemented. It is clear that the use of mental first aid lies on the active support by the organization. Education, open

discussions and recommended use are ways to make mental first aid a part of daily practice and midwives to feel supported by their management. How different people cope with crisis can differ greatly still being successful. Coping strategies can be everything from science to arts, nature and whatever brings the mind to peace. Palosaari (2008) lifts up two central elements as discussion and embodiment. (Palosaari, 2008)

Many have a great need to immediately unload and tell someone about what they have experienced. It is also a way to get an overview of the situation, what happened and what is the damage. This helps to get 'a hold of the situation' (Dyregrov, 2002). The human being has a substantial need to restore the feeling of integrity rather than to unburden their feelings. This is where the expression to 'get of one's mind' has its origin (Hammarlund, 2001). Discussions with colleagues is a natural and understandable way of coping and also the most frequently mentioned by the informants. The same also comes up in earlier research (Rice &Warland, 2013; Hunter& Warren 2014; Halperin et. al. 2011).
Hunter& Warren (2014) also mentions that the discussion most usually take part between a like-minded, trusted colleague to whom the midwife felt they had a mutually supportive relationship. The support from empathic, trusted colleagues that offer opportunities for reflection helped to gain adversity and perspective (Hunter& Warren, 2014).
But nor all felt they had someone to discuss with at work. Many informants mentioned that they have tried to discuss critical incidents at home or with friends but did not feel supported or understood. Hunter& Warren (2014) had likely reports by Midwives in the UK. Many felt the need to discuss incidents with friends and family but still felt they could not get the needed support by them (Hunter& Warren, 2014; Rice&Warland 2013). Hammarlund (2001) again takes hold of the importance of the support by friends and family as a useful coping method if it feels right.

The need to discuss an incident might stretch over a longer period of time. Some have a need to go over the incident again and again and talk about whenever someone is there to listen. It is therefore important to offer defusing and discussion several times. (Dyregrov, 2002; Palosaari, 2008)

Forcing oneself to forget, just continuing, not letting feelings sink in, enduring, these were frequently mentioned in the interview. Some felt this was part of the job, that they just had to manage that they learnt to not take things so emotionally by time, that it was a sort of professional growth. Pezaro et. al., (2016) highlights the "overarching superhuman philosophy that midwives should just be able to cope". This only impairs help seeking and healthy behaviors (Pezaro et. al., 2016). Forcing to forget increases the risk of inappropriate coping methods such as alcohol use, smoking, drugs to avoid and escape the emotions and stressors that comes up (Hammarlund 2001). Levine (1997) expresses the lack of tolerance in our culture for the emotional vulnerability traumatized persons' experience. Also the time to work through the emotional events is much limited. This leads to denial being way too common and words like "pull yourself together, forget about it, grin and bear it, get on with your life" are used to disregard the effects of trauma and crisis. (Levine, 1997)

Experience was seen as helping when encountering a crisis. Some felt help by their earlier experiences other saw help in the knowledge of know possessing this experience. Research made by Sheen et. al. (2016b) and Wright et. al. (2017) report findings of midwives experiencing events in the early career as more difficult as they have no earlier experience to draw on. Palosaari (2008) however points out that the number of experienced critical incidents does not protect from becoming burdened or traumatized nor increase easier recovering. There are cases where we should react and feel affected. Palosaari (2008) lifts up the cultural aspect of a defusing session in the way that it allows especially younger participant to learn that all sorts of reactions are allowed. If they see older colleagues crying and reacting it allows them to let their emotions and feelings out as well. (Palosaari, 2008)

Wright et. al. (2017) as well as Halperin et. al. (2011) lifts up the need of a systematic program for support in crisis situations. Support by colleagues and management as well as appropriate staffing to enable the use of such program is crucial for its establishment and implementation.

When using a qualitative research method there are many different ways for gathering data. The critical incident technique gives the possibility to use not only personal

interviews but also group interviews, questionnaires and more. For this thesis in-depth interviews could also be applicable as a data gathering tool (Cisek, 2016).

In-depth interview is a purposeful discussion led by the researcher and directed to the participant. Through objective probing and stimulus, the researcher obtains more in-depth information about the topic. The interview is usually planned in beforehand and a guide has been set up to lead the interview (WHO, 2014; Bowling 2014). Still being generally unstructured giving the participant the opportunity to feel relaxed and allowing them to speak freely in their own pace (Hammersley, M. 2013). The participant is encouraged to go deeply in to the subject prompting more details without leading the participant into giving specific answers. The interviews take up to one hour and are then transcribed verbatim (WHO, 2014). The researcher needs to be highly trained and aware of the research issues in order to carry out the in-depth interview (Bowling, 2014).

In-depth interviews tend to give the researcher many units of analysis that is not always easy to identify. Therefore, it is important for the researcher to be familiar with the subject matter in order to be able to make a trustworthy analyze (Campbell et.al, 2013).

In this thesis the chosen method is based on the sensitive subject that strongly originates from the informants own personal experiences. The critical incident technique gives the informant the opportunity to talk freely and from their own point of view. Therefore, the informants emotional burden and the possible positive or negative outcome of their coping method gets visible for the researcher (Cisek, 2016).

In-depth interview would give the possibility for more structured and guided interviews. In this case the risk of important information left un observed is arising using more structured interview methods. The analysis of the data is similar in both methods as they both aim to seek similarities in the data. In this research case the critical incident technique according to the given facts is a more suitable data gathering tool as it gives the participant the free opportunity to share their experiences. Even though the in-depth interview is a well applicable data gathering tool it leaves a bigger possibility too unintentional leading by the researcher (Hammersley 2013).

The collected data needs to be considered from a neutral and objective perspective when performing qualitative content analysis (Bengtsson 2016).

The aim of this research was not to diagnose the informants with any stress related syndrome. The focus was on clarifying the coping methods amongst midwives used to cope with crises they face at work and how the used coping methods influence their ability to give good and empathic care. Further research similar to Beck et. al. (2015), Sheen et. al. (2014), Rice & Warland (2013) and Leinweber & Rowe (2010) amongst others, about the scale of secondary traumatic stress, vicarious traumatization and compassion fatigue amongst Finnish midwives should be done to determine the state of the midwives' psychological state in Finland. The use of the STS Scale could be an instrument for research (Beck et. al., 2015). Also the use Perceptions of Empowerment in Midwifery Scale used by Hildinsson et. al. (2016) could be of interest within the Finnish midwifery workforce.

REFERENCES

Baird K., Kracen A., (2006) *Vicarious traumatization and secondary traumatic stress: A research syntethis*, Counselling psychology Quarterly. DOI: 10.1080/09515070600811899

Beck, C. T., LoGiudice, J., & Gable, R. K. (2015). *A Mixed-Methods Study of Secondary Traumatic Stress in Certified Nurse-Midwives: Shaken Belief in the Birth Process*. Journal Of Midwifery & Women's Health, *60*(1), 16-23. doi:10.1111/jmwh.12221

Bengtsson, M. (2016). *How to plan and perform a qualitative study using content analysis*. Nursing Plus Open (2), 8-14. doi.org/10.1016/j.npls.2016.01.001

Berg, Bruce Lawrence. *Qualitative Research Methods for the Social Sciences*. 8th edition. Boston, MA: Allyn and Bacon, 2012; Denzin, Norman. K. and Yvonna S. Lincoln. *Handbook of Qualitative Research*. 2nd edition. Thousand Oaks, CA: Sage, 2000; Marshall, Catherine and Gretchen B. Rossman. *Designing Qualitative Research*. 2nd ed. Thousand Oaks, CA: Sage Publications, 1995; Merriam, Sharan B. *Qualitative Research: A Guide to Design and Implementation*. San Francisco, CA: Jossey-Bass, 2009. From: http://libguides.usc.edu/writingguide/qualitative, Accessed 31.10.16

Berg, G. M., Harshbarger, J. L., Ahlers-Schmidt, C. R., & Lippoldt, D. (2016). *Exposing Compassion Fatigue and Burnout Syndrome in a Trauma Team: A Qualitative Study*. Journal Of Trauma Nursing, *23*(1), 3-10. doi:10.1097/JTN.0000000000000172

Bovopoulos N., Jorm A., Bond K., LaMontagne A., Reavley N., Kelly C., Kitchener B., Martin A. (2016) *Providing mental health first aid in the workplace: A Delphi consensus study*. BMC Psychology 4:41 Doi 10.1186/s40359-016-0148-x.

Bowling, A. (2014). Research Methods in Health: Investigating Health and Health Services. Milton Keynes: McGraw-Hill Education. ISBN: 9780335262755

Campbell J., Quincy C., Osserman J., Pedersen O., (2013). *Coding In-Depth Semistructured Interviews: Problems of Unitization and Intercoder Reliability and Agreement*, Sociological methods and research, 42(3) 294-320, doi/pdf/10.1177/0049124113500475

Cisek, S. (2016). *Critical Incident Technique in Information Literacy Research in the XXI Century*, DOI: 10.13140/RG.2.2.33021.97768

Cocker F & Joss N. (2016) *Compassion Fatigue among Healthcare, Emergency and Community Service Workers: A Systematic Review*. International Journal of Environmental Research and Public Health 13 618; Doi:103390/ijerph13060618.

Creedy, D. K., Sidebotham, M., Gamble, J., Pallant, J., & Fenwick, J. (2017). Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey. BMC Pregnancy & Childbirth, 171-8. doi:10.1186/s12884-016-1212-5

Degree Thesis, from: https://start.arcada.fi/en/course-studies/degree-thesis#page-top, accessed 31.1.17

Diak, (2012) *Towards Research-Orientation in professional Practice, a guide to Thesis Work at Diaconia University of Applied Sciences*, Diaconia University of Applied Sciences, Helsinki, ISBN 978-952-493-121-2

Dowling, R., Lloyd, K., & Sandie Suchet-Pearson. (2016). Qualitative methods 1: Enriching the interview. *Progress in Human Geography, 40*(5), 679-686. 10.1177/0309132515596880

Dyregrov A., (2002) *Katastrofpsykologi*, Second edition, Studentlitteratur Malmö, ISBN 978-91-44-02244-4

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open, 4*(1), 2158244014522633. doi:10.1177/2158244014522633

Elo S. &Kyngäs (2008) The qualitative content analysis process, *Journal of Advanced Nursing 62(1),* 107-115, doi: 10.11111/j1365-2648.2007.04569x

Eriksson. K. (1994) *Den lidande människan*, First edition, Liber Utbildning Berlings, Arvlöv, ISBN 91-634-0862-7

Ford, E., & Ayers, S. (2011). Support during birth interacts with prior trauma and birth intervention to predict postnatal post-traumatic stress symptoms. *Psychology & Health*, *26*(12), 1553-1570. doi:10.1080/08870446.2010.533770

Good Scientific Practice at Arcada, from: https://start.arcada.fi/sites/default/files/dokument/examensarbete/good_scientific_practice_in_studies.pdf. Accessed 31.1.17

Halperin, O., Goldblatt, H., Noble, A., Raz, I., Zvulunov, I., & Liebergall Wischnitzer, M. (2011). Stressful Childbirth Situations: A Qualitative Study of Midwives. *Journal Of Midwifery & Women's Health*, 56(4), 388-394. doi:10.1111/j.1542-2011.2011.00030.x

Hammarlund C-L., (2001) *Bearbetande samtal, krisstöd, avlastningssamtal, stess och konflikthantering*, Second revised edition, 2012, Natur &kultur Stockholm, ISBN 978-91-27-13089-0

Hammersley, M. (2013). Defining qualitative research. In *What is Qualitative Research?* (The 'What is?' Research Methods Series, pp. 1–20). London: Bloomsbury Academic. Retrieved December 6, 2016, http://dx.doi.org/10.5040/9781849666084.ch-00,

Harper, D. (2010). *Online Etymology Dictionary*. Retrieved April 5, 2017 from Dictionary.com website http://www.dictionary.com/browse/midwife

Hedrenius S & Johansson S. (2013), *Krisstöd vid olyckor, katastrofer och svåra händelser, att stärka människors motståndskraft*. First edition. Natur & kultur, Stockholm, ISBN 978-91-27-13561

Henson, J. S. (2017). When Compassion Is Lost. *MEDSURG Nursing*, *26*(2), 139-142.

Hildingsson, I., Gamble, J., Sidebotham, M., Creedy, D., Guilliand, K., Dixon, L., Pallant, J., Fenwick, J. (2016). Midwifery Empowerment: National Surveys of Midwives from Australia, New Zealand and Sweden. *Midwifery* (40), 62-69. 10.1016/j.midw.2016.06.008

Hunter, B &Warren, L. (2014) Midwives experiences of workplace resilience. *Midwifery, 30*(8), 926-934. Doi 10.1016/j.midw.2014.03.010

Leinweber, J. & Rowe, H. (2010) The costs of 'being with the woman': secondary traumatic stress in midwifery. *Midwifery 26 issue 1, 76-87,* Elsevier. DOI: http://dx.doi.org/10.1016/j.midw.2008.04.003.

Leinweber J., Creedy D., Rowe, H., Gamble J., (2017 a) responses to birth trauma and prevalence of posttraumatic stress among Australian midwives. *Women and Birth* 2017 Feb;30(1):40-45. doi: 10.1016/j.wombi.2016.06.006.

Leinweber J, Creedy D., Rowe H, Gamble J. (2017 b) A socioecological model of posttraumatic stress among Australian midwives. *Midwifery*.2017;45:7–13. doi: 10.1016/j.midw.2016.12.001

Levine, P. A. (1997). *Waking the tiger: Healing trauma: the innate capacity to transform overwhelming experiences*. Berkeley, Calif: North Atlantic Books. ISBN-13: 978-1-55643233-0

Ludick, M., & Figley, C. R. (2016). Toward a Mechanism for Secondary Trauma Induction and Reduction: Reimagining a Theory of Secondary Traumatic Stress. *Traumatology*. Advance online publication. http://dx.doi.org/10.1037/trm0000096

Malmström et.al. (2002) *Bonniers Svenska Ordbok*, Åttonde reviderade upplagan, Bonniers förlag, ISBN 91-0-057704-9

Metsämuuronen J., (2008) *Laadullisen tutkimuksen perusteet*, Metodologia-sarja 4, Gummerus Jyväskylä ISBN 978-952-5372-24-3

Ostrom, L. T., & Wilhelmsen, C. A. (2012). Risk Assessment: Tools, Techniques, and Their Applications (1). Somerset, US: Wiley.

Palosaari E., (2008) *Lupa särkyä kriisistä elämään*, Second edition, Edita Helsinki, ISBN 978-951-37-4880-7

Pezaro, S. (2016). The case for developing an online intervention to support midwives in work-related psychological distress. *British Journal Of Midwifery*, 24(11), 799-805.

Pezaro, S., Clyne, W., Turner, A., Fulton, E., & Gerada, C. (2016). 'Midwives overboard!' inside their hearts are breaking, their makeup may be flaking but their smile still stays on. *Women and Birth, 29*(3), e59-e66. doi: 10.1016/j.wombi.2015.10.006.

Pryce, C. (2016). Impact of shift work on critical care nurses. *Canadian Journal Of Critical Care Nursing*, *27*(4), 17-21.

Rice H. & Warland J. (2013) Bearing witness: Midwives experiences of witnessing traumatic birth. *Midwifery 29*, 1056-1063 Elsevier. DOI http://dx.doi.org/10.1016/j.midw.2012.12.003

Von Rueden, K., Hinderer, K., McQuillan, K., Murray, M., Logan, T., Kramer, B., & ... Friedmann, E. (2010). Secondary traumatic stress in trauma nurses: prevalence and

exposure, coping, and personal/environmental characteristics. *Journal Of Trauma Nursing*, *17*(4), 191-200. doi:10.1097/JTN.0b013e3181ff2607

Sheen, K., Slade, P., & Spiby, H. (2014). An integrative review of the impact of indirect trauma exposure in health professionals and potential issues of salience for midwives. *Journal of Advanced Nursing*, 70(4), 729-743. doi:10.1111/jan.12274

Sheen K., Spiby H., Slade P. (2015) Exposure to traumatic perinatal experiences and posttraumatic stress symptoms in midwives: Prevalence and association with burnout. *International Journal of Nursing studies* 52 (2015) 578- 587. Doi 10.1016/j.ijnurstu.2014.11.006

Sheen, K., Spiby, H., & Slade, P. (2016a). The experience and impact of traumatic perinatal event experiences in midwives: A qualitative investigation. *International Journal Of Nursing Studies*, *53*61-72. doi:10.1016/j.ijnurstu.2015.10.003

Sheen, K., Spiby, H., & Slade, P. (2016b). What are the characteristics of perinatal events perceived to be traumatic by midwives, *Midwifery* (40), 55-61. doi.org/10.1016/j.midw.2016.06.007

Schrøder, K., Larsen, P., Jorgensen, J., Hjelmborg, J., Lamont, R., & Hvidt, N. (2016). Psychosocial health and well-being among obstetricians and midwives involved in traumatic child birth. *Midwifery* (41), 45-53. http;//dx.doi.org/10.1016/j.midw.2016.07.013

Soares, M. M., Jacobs, K., Zimberg, I. Z., Fernandes Junior, S. A., Crispim, C. A., Tufik, S., & de Mello, M. T. (2012). Metabolic impact of shift work. *Work*, *41*4376-4383.

Stelter, R. (2010). Experience-Based, Body-Anchored Qualitative Research Interviewing. *Qualitative Health Research, 20*(6), pp. 859-867. doi/pdf/10.1177/1049732310364624.

STM, 2017, Sociaali ja terveysministeriö [Ministry of social affairs and health] https://www.finlex.fi/fi/laki/ajantasa/2002/20020738?search%5Btype%5D=pika&search%5Bpika%5D=%20työturvallisuuslaki#L2P8

Somekh B & Lewin C, (2005) Research Methods in the Social Sciences, *SAGE publications*, London, ISBN 0-7619-4401-X

The American Heritage® Science Dictionary. Retrieved April 5, 2017 from Dictionary.com website http://www.dictionary.com/browse/crisis

UNFPA (2014) The State of the Worlds Midwifery a Universal Pathway. A Woman's Right to Health. http://www.unfpa.org/sites/default/files/pub-pdf/EN_SoWMy2014_complete.pdf

Urquhart C., Light A., Thomas R., Spink S., (2003) Critical Incident technique and explicitation interviewing in studies of information behavior, in *Library & Information Science Research* 25(1):63-88 DOI: 10.1016/S0740-8188(02)00166-4.

Varantola et al (2012) Finnish advisory board on research integrity. ISBN 978-952-5995-07-7 (pdf) From: http://www.tenk.fi/sites/tenk.fi/files/HTK_ohje_2012.pdf accessed 7.4.17

Wahlberg, Å., Andreen Sachs, M., Bergh Johannesson, K., Hallberg, G., Jonsson, M., Skoog Svanberg, A., & Högberg, U. (2017). Self-reported exposure to severe events on the labour ward among Swedish midwives and obstetricians: A cross-sectional retrospective study. *International Journal of Nursing Studies*, *65*, 8-16. 10.1016/j.ijnurstu.2016.10.009

Wickremaratne, K. (2017). Rotating shift work and colorectal cancer among nurses and midwives: a cross-sectional study. *Australian Journal Of Advanced Nursing*, *34*(4), 6-15.

WHO, (2014), Implementation Research Toolkit, From http://www.who.int/tdr/publications/year/2014/9789241506960_workbook_eng.pdf?ua=1.

WHO (2015) Does the world have enough midwives? http://www.who.int/maternal_child_adolescent/news_events/news/2015/role-of-midwives/en/

Wright, E. M. (2017). Evaluation of a web-based holistic stress reduction pilot program among nurse-midwives. *Journal of Holistic Nursing*, 0898010117704325. doi:10.1177/0898010117704325

Wright, E. M., Matthai, M. T. and Warren, N. (2017), Methods for Alleviating Stress and Increasing Resilience in the Midwifery Community: A Scoping Review of the Literature. *Journal of Midwifery & Women's Health*, 62: 737–745. doi:10.1111/jmwh.12651

APPENDICES

Appendix 1. Letter to the informants/ Letter of consent

Letter to the informants/ Letter of consent

You are kindly requested to participate in the Master's thesis study about Coping with Crisis Situations amongst Midwives at a delivery ward. The Master's thesis is a part of the Masters in Global Health Care program which is a combined education with the University of Applied Science Arcada, Diak and the University of Eastern Africa Baraton. This Master's thesis is a commissioned work for the Helsinki University Hospital.

The researcher is a midwife working at a delivery ward at The Hospital District of Helsinki and Uusimaa, a defusing instructor and member of the hospitals mental first aid team. The main interest is in how midwives at a delivery ward are coping with crisis situations they face at work. The study is based on the fact that crisis situations have noteworthy influences on the health care professional and their ability to give emphatic and good care. The study aims to review the need of mental first aid amongst midwives. The informant is offered to read the study plan on request.

Participation in this thesis is strictly anonymous and voluntary. The gathered data will be coded with A, B, C etc., without the names or identification of the informant. If agreed by the informant, the data will be saved in a safe place to possibly be used in later researches by the researcher. The data will not be given to third parties in any case. The interview will be based on critical incident technique and done privately with the researcher and take up to one hour. The interview will be held at the workplace possibly at the end of a shift, and is a part of working hours.

The informants are asked to tell their view on a critical incident they experienced during their work and how they are coping with that incident. The interviews will be

audiotaped and then transcribed. Some written notes during the discussion might also be made.

Due to the sensitive topic and the emotions that might arise through the discussion the informant will be offered a separate possibility for discussion after the interview if needed.

By participating in this study the informant gives his/her consent to use the gathered data. The informant has the right to withdraw at any time during the writing process without causing penalties.

I am more than willing to answer any questions regarding this research.

Henrika von Schantz-Enoksson
Masters student, Midwife, Defusing instructor
040-7196931
vonschh@arcada.fi
Thesis supervisor: Gun-Britt Lejonqvist TTL, gbl@arcada.fi

Suostumuskirje

Pyydän teitä osallistumaan YAMK tutkimukseen kätilöiden selviytymisestä kriisitilanteista. Tutkimus on osana Arcadan, Diakin ja University of Eastern Africa Baritonin yhteistyökoulutusta Masters of Global Health Care. Tutkimus on tilaustyö Helsingin ja Uudenmaan sairaanhoitopiiriltä. Pyydän kohteliaasti Teitä osallistumaan haastatteluun. Haastattelu toteutetaan yksilöhaastatteluna työpaikalla, työaikana, sovittaessa työvuoron päätteeksi. Haastattelussa käytetään kriittisten tapahtumien menetelmää (critical incident technique). Haastateltava pyydetään vapaasti kertomaan työssään kohtaamasta kriisistä ja sen vaikutuksesta itseensä. Haastattelu kestää noin tunnin. Haastattelut nauhoitetaan ja litteroidaan. Myös muistiinpanoja saatetaan tehdä. Vain tutkijalla on oikeus materiaalin. Materiaali saatetaan tallentaa turvallisesti mahdollista jatkotutkimusta varten. Materiaalia ei luovuteta kolmansille osapuolelle. Johtuen herkästä, tunteita nostattavasta aiheesta haastateltavalle tarjotaan erillinen keskustelumahdollisuus, mikäli hän kokee siihen tarvetta haastattelun jälkeen.

Tutkimuksen tekijä työskentelee HUSin synnytysosastolla kätilönä sekä toimii henkisen ensiapuryhmän jäsenenä ja on myös Defusing ohjaaja. Tutkimuksen pääaiheena on tutkia, miten kätilö selviytyy työssä kohtaamistaan kriiseistä. Tutkimusten valossa saatu tieto kriisitilanteiden negatiivisesta vaikutuksesta terveysalan ammattilaisen henkiseen hyvinvointiin ja sitä mukaan mahdollisuuteen antaa hyvää empaattista hoitoa, toimii tämän tutkimuksen taustana. Tutkimuksen tavoitteena on kartoittaa synnytyssalikätilöiden tarvetta henkiseen ensiapuun. Tutkimus pyrkii antamaan työkaluja, miten henkistä ensiapua voidaan kehittä työntekijöiden tarpeista lähtöisin. Ja sitä mukaan vähentää kriisien aiheuttamaa lyhyt- ja pitkäaikaista stressireaktiota ja sairauspoissaoloa. Sekä parantaa selviytymistä haastavassa työssä kohtaamista kriiseistä.

Osallistuminen tähän tutkimukseen on täysin anonyymiä ja vapaaehtoista eikä haastateltavan identiteettiä tuoda julki missään vaiheessa. Haastattelut erotellaan A, B, C erottelulla. Haastateltavalla on mahdollisuus lukea tutkimussuunnitelma, mikäli näin toivovat.

Osallistumalla tutkimukseen haastateltava antaa suostumuksensa käyttää saatua materiaalia. Haastateltavalla on oikeus vetäytyä tutkimuksesta koko kirjoitusprosessin ajan ilman että siitä koituu kielteisiä seuraamuksia.

Mielelläni vastaan tutkimusta koskeviin kysymyksiin.

Henrika von Schantz-Enoksson
YAMK opiskelija, Kätilö, Defusing ohjaaja
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vonschh@arcada.fi
Opinnäytetyön ohjaaja Gun-Britt Lejonqvist HVL, gbl@arcada.fi

Brev till informanterna

Ni är vänligen ombedda att delta i forskningen angående hur barnmorskor hanterar krissituationer de möter i arbetet. Forskningen är en del av högre yrkeshögskoleutbildningen Masters of Global Health Care som är en gemensam

utbildning med Arcada, Diak och University of Eastern Africa Baraton. Forskningen är ett beställningsarbete av Helsingfors och Nylands sjukvårdsdistrikt, HNS.
Forskaren arbetar som barnmorska vid HNS förlossningsavdelning samt är en del av sjukhusets mentala förstahjälp team och är utbildad defusing handledare. Forskningens huvudsyfte är att kartlägga hur barnmorskor hanterar krissituationer de stöter på i arbetet. Forskningen baserar sig på vetskapen om den negativa inverkan krissituationer har på sjukvårdspersonalens mentala välbefinnande samt dess inverkan på arbetsförmågan. Forskningen ämnar kartlägga barnmorskors behov av mental förstahjälp samt ge verktyg till hur mentala förstahjälpen kan utvecklas utgående från personalens önskemål och på så vis minska lång- och korttids stressreaktioner och därmed också mentalt illabefinnande och sjukledigheter orsakade av krissituationer.
Ni ombeds delta i en personlig intervju som utförs med hjälp av kritisk incident teknik (Critical Insident technique) där informanten ombeds berätta om egna erfarenheter av en krissituation och hur den påverkat en själv. Intervjun utförs på arbetsplatsen som en del av arbetstiden och beräknas ta ca. en timme. Intervjun kan hållas efter arbetsturen enligt överenskommelse. Deltagande i intervjun är frivilligt och strikt anonymt. Intervjun bandas in och littereras. Även anteckningar kan göras. Intervjuerna separeras utan namn med A, B, C indelning. Endast forskaren har tillgång till materialet. Materialet kan sparas på säkert ställe för eventuell framtida forskning. Materialet ges inte vidare till tredje part. På grund av det känsloveckande temat erbjuds informanten en möjlighet till diskussion vid separat tillfälle ifall behov uppkommer.
Informanten erbjuds möjlighet att läsa forskningsplanen på begäran.
Genom att delta i intervjun ger informanten sitt samtycke till att delta i forskningen. Informanten har rätt att dra sig ur forskningen under skrivprocessens gång utan att det medför negativa konsekvenser.
Eventuella frågor angående forskningen besvaras mer än gärna.

Henrika von Schantz-Enoksson
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vonschh@arcada.fi
Handledare Gun-Britt Lejonqvist TTL, gbl@arcada.fi

Appendix 2. Study permit Helsinki University hospital

HELSINGIN JA UUDENMAAN SAIRAANHOITOPIIRI **OPINNÄYTETYÖN TUTKIMUSLUPAHAKEMUS** Liite 1

Opinnäytetyön tekijää koskevat tiedot	Suku- ja etunimet von Schantz- Enoksson Henrika
	Virka/toimi tai oppiarvo/koulutustausta Kätilö-Sairaanhoitaja amk
	HUS:n palveluksessa ☒ Kyllä ☐ Ei
	Sähköpostiosoite/puh/gsm henrika.schantz-von@hus.fi
	Kotiosoite Suvisaarentie 37 02380 Espoo
	Yliopisto ja laitos/ammattikorkeakoulu/oppilaitos, jossa opiskelee Arcada/Diak/ UEAB
	Yliopiston laitoksen/ammattikorkeakoulun/oppilaitoksen osoite Jan Magnus Janssons plats 1 00560 Hki
Opinnäytetyön ohjaaja oppilaitoksessa	Opinnäytetyön ohjaaja(t), ohjaajien oppiarvot ja yhteystiedot (sähköposti/puhelin) Gun-Britt Lejonqvist TTL gbl@arcada.fi/ 0207 699646
	Opinnäytetyön ohjaaja(t), ohjaajien ilmoitus siitä, onko opinnäytetyön tutkimussuunnitelma hyväksytty esitetyssä muodossa Tutkimussuunnitelma hyväksytty 7.3.2017 Gun-Britt Lejonqvist
HUS:n vastuuhenkilöä koskevat tiedot	Suku- ja etunimi/virka/toimi
	Työpaikan osoite
	Sähköpostiosoite/puh/gsm
	HUS:n tulosalue, tulosyksikkö tai liikelaitos, jossa vastuuhenkilö työskentelee
Opinnäytetyötä koskevat tiedot	Opinnäytetyön nimi julkisessa muodossa Coping with crisis situations amongst midwifes
	Asiasanat (max 5 kpl) **Compassion fatigue, secondary stress, presenteeism, caring , midwifery**

Opinnäytetyön taso ☐ Lisensiaattitutkinto ☐ Maisteritutkinto ☒ Ylempi AMK-tutkinto ☐ Kandidaatti ☐ AMK-tutkinto ☐ Muu, mikä?	Opinnäytetyön tieteenala ☐ Lääketiede ☐ Hammaslääketiede ☐ Hoitotiede ☐ Terveyshallintotiede ☒ Muu, mikä? Terveystiede	
Opinnäytetyö on osa laajempaa HUS-hanketta? ☒ Ei ☐ Kyllä, mitä?	Arvioitu aloituspvm.	Arvioitu päättymispvm.
Opinnäytetyön suorituspaikat HUS:ssa HYKS-sairaanhoitoalue ☐ HYKS Akuutti ☐ HYKS Lasten ja nuorten sairaudet (LaNu) ☐ HYKS Leikkaussalit, teho- ja kivunhoito (ATeK) ☒ HYKS Naistentaudit ja synnytykset (NaiS) ☐ HYKS Psykiatria ☐ HYKS Pää- ja kaulakeskus ☐ HYKS Sisätaudit ja kuntoutus (Sisu) ☐ HYKS Sydän- ja keuhkokeskus (SK-keskus) ☐ HYKS Syöpäkeskus ☐ HYKS Tukielin- ja plastiikkakirurgia ☐ HYKS Tulehduskeskus ☐ HYKS Vatsakeskus ☐ HYKS-sairaanhoitoalueen johto	☐ Hyvinkään sairaanhoitoalue ☐ Lohjan sairaanhoitoalue ☐ Länsi-Uudenmaan sairaanhoitoalue ☐ Porvoon sairaanhoitoalue ☐ HUS Yhtymähallinto ☐ HUS-Apteekki ☐ HUS-Desiko ☐ HUS-Kiinteistöt Oy ☐ HUS-Logistiikka ☐ HUS-Kuvantaminen ☐ HUS-Servis ☐ HUS-Tilakeskus ☐ HUSLAB ☐ Ravioli ☐ Uudenmaan sairaalapesula Oy ☐ Muu, mikä	

	Kohderyhmä ☐ Potilaat ☐ Omaiset ☒ Henkilökunta ☐ Asiakirjat ☐ Muu, mikä?	Tutkittavien/havaintoyksikköjen määrä N=6-10 kätilöä
	Aineiston keruumenetelmä ☐ Kysely ☒ Haastattelu ☐ Havainnointi ☐ Asiakirja-analyysi ☐ Muu, mikä?	
	HUS:n ulkopuoliset yhteistyötahot	
	Aiheuttaako opinnäyte kustannuksia HUS:lle? ☐ Kyllä (Kustannusarvio ja rahoitussuunnitelma erillisellä liitteellä) ☒ Ei (Tutkimusluvan myöntäjä voi vaatia selvitystä tapauskohtaisesti)	Opinnäytetyön hyödyt/vaikutukset HUS:n toimintaan ☒ Välitön sovelluvuusarvo toimintaan, mihin HEA-työhön, työhyvinvointi, työssä jaksaminen ☐ Ei välitöntä sovellettavuutta
	Opinnäytetyön tekijänä sitoudun noudattamaan sairaalan antamia ohjeita ja sääntöjä ja raportoimaan opinnäytetyöni tuloksista tutkimusluvan myöntäjälle. Päiväys 20.4.2017 Henriika von Schantz-Enholsen Opinnäytetyön tekijä/tekijät nimenselvennys Henriika von Schantz-Enholsen	Päiväys 28.4.2017 Marjaana Hankivaara HUS:n vastuuhenkilö nimenselvennys
	Opinnäytetyön tutkimusluvan valmistelija HUS:ssa Päiväys 28.4.2017 Outi Halen Laisi Halme Opinnäytetyön tutkimusluvan valmistelija nimenselvennys	Opinnäytetyön tutkimusluvan puoltaja HUS:ssa Päiväys 2.5.2017 Opinnäytetyön tutkimusluvan puoltaja nimenselvennys

Hakemukseen on liitetty seuraavat liitteet

Tarvittavat liitteet
- ☒ Opinnäytetyön suunnitelma ja selostus opinnäytetyön suorittamisesta HUS:ssa
- ☒ Tutkimussuunnitelman tiivistelmä
- ☐ Aineiston keruulomake
- ☒ Kysely/haastattelulomakkeen saatekirje

Lisäksi tarvittaessa
- ☐ Opinnäytetyötä suorittava muu henkilöstö
- ☐ Kustannusarvio ja rahoitussuunnitelma
- ☐ Hakemus tietojen saamiseksi salassa pidettävistä asiakirjoista
- ☐ Vaitiolositoumus/salassapito- ja käyttäjäsitoumus
- ☐ Tutkittavan tiedote ja suostumus
- ☐ Eettisen toimikunnan lausunto
- ☐ STM:n lupa
- ☐ Henkilörekisteriseloste

Alla olevaa päätöskohtaa käytetään silloin, kun päätös voidaan antaa lomakepäätöksenä (kts. JYL 2/2015, kohta 4.3)

LOMAKE-PÄÄTÖS	**Lomakepäätöksen numero** 1/2017 ☑ Myönnetään hakemuksen mukaisesti ☐ Myönnetään edellyttäen, että ☐ Hakemus hylätään seuraavin perusteluin *) *) Oikaisuvaatimusohje liitteenä Tutkimusluvan alkamispäivä — Tutkimusluvan päättymispäivä Päiväys 12.5.17 Tutkimusluvan myöntäjä nimenselvennys Juha Tapanainen Professori, ylilääkäri HYKS Naistenklinikka Käyntiosoite: Haartmaninkatu 2, Helsinki Postiosoite: PL 140, 00029 HUS

Opinnäytetyön tekijä	Opinnäytetyöntekijä tai tekijät. Jos tekijöitä on useita, ensimmäiseksi merkityn henkilön osoite- ja yhteystiedot
Opinnäytetyön ohjaaja	Yliopiston tai oppilaitoksen ohjaaja(t) ja yhteystiedot
HUS:n vastuuhenkilö	Tutkimuksen vastuuhenkilön ohjauksessa opiskelija voi suorittaa opinnäytetyön lakien ja asetusten, viranomaismääräysten ja HUS:n määräysten ja ohjeiden mukaisesti ja raportoida opinnäytetyöstä tutkimusluvan myöntäjälle. Vastuuhenkilö seuraa tutkimuksen kulkua ja huolehtii sen järjestämistä koskevasta tiedottamisesta ja etsii opinnäytetyön tarvitsemat yhdyshenkilöt ao. tutkimusyksiköistä. Jos tutkimus kohdistuu sairaanhoitoalueen useaan tulosyksikköön, vastuuhenkilö voidaan nimetä sairaanhoitoalueelta. Jos tutkimus kohdistuu usealle sairaanhoitoalueelle tai koko HUS:iin, vastuuhenkilö voidaan nimetä yhtymähallinnosta.
Opinnäytetyötä koskevat tiedot	Koska nimi tulee julkiseen rekisteriin, opinnäytetyön nimeksi on syytä valita otsikko, joka kuvaa tehtävää työtä. Opinnäytetyön tyyppi luokitellaan esim. pro gradu, kliininen hoitotiede Opinnäytetyön suorituspaikat: merkitään kaikki, joista aineisto kerätään. Tutkittava(t) kohderyhmät ja havaintoyksiköt kuvataan esim. Potilaat N=10, Omaiset N=10, Asiakirjat N=10. Aineiston keruumenetelmät luokitellaan.
Asiasanat	Käytetään esim. YSA/FinMeSH tai hoitotyön asiasanastoa enintään 5 kpl
HUS:n ulkopuoliset yhteistyötahot	Kuvataan, mitkä muut laitokset ja yhteistyötahot ovat mukana esim. monikeskustutkimuksen osapuolet.
Aiheuttaako opinnäytetyö kustannuksia HUS:lle	Opinnäytetyö ei saa aiheuttaa tavanomaiseen toimintaan nähden ylimääräisiä kustannuksia tutkittavalle tai sairaalalle. Aloitusluvan myöntäjä voi vaatia perustelut siitä, miksi kustannuksia ei aiheudu. HUS:n kannalta merkittävistä kustannuksissa eritellään tarvittava henkilökunnan työpanos (haastatteluaika/hlö), monistus- ja materiaalikulut, asiakirjapoimintakulut yms. Ylimääräisistä kustannuksista laaditaan kustannusarvio ja rahoitussuunnitelma, jotka toimitetaan erillisenä liitteenä.
Opinnäytetyön hyödyt ja vaikutukset HUS:n toimintaan	Opinnäytetyön tekijän ja ohjaajan näkemys opinnäytetyön hyödyistä/vaikutuksista HUS:n toimintaan.
Eettinen arviointi	Luvan myöntäjä arvioi, tarvitaanko eettisen toimikunnan lausuntoa.
Allekirjoitukset	Opinnäytetyön tekijän, HUS:n vastuuhenkilön ja puoltajan (tapauskohtaisesti) sekä opinnäytetyön tutkimusluvan valmistelijan (tapauskohtaisesti) allekirjoitukset. Tapauskohtaisesti on harkittava puoltajan ja valmistelijan tarve. Lupa myönnetään ohjeen mukaan joko lomakepäätöksenä tai viranhaltijapäätöksenä.
Liitteet	Tutkimuslupahakemukseen liitetään opinnäytetyön suunnitelma (ml tarvittava selostus opinnäytetyön suorittamisesta HUS:ssa), opinnäytetyön tutkimussuunnitelman tiivistelmä, aineistonkeruulomake ja kysely/haastattelulomakkeen saatekirje. Tutkimusluvan myöntäjä voi lisäksi tarvittaessa vaatia muuta liiteaineistoa.

Appendix 3 Research review table

	Author/ Name of article	Country	Year	Published in	Study design	Method	N	Found	Keywords	Aim	Result
1	Beck, C. T., LoGiudice, J., & Gable, R. K. (2015). A Mixed-Methods Study of Secondary Traumatic Stress in Certified Nurse-Midwives: Shaken Belief in the Birth Process. Journal Of Midwifery & Women's Health, 60(1), 16-23. doi:10.1111/jmwh.12221	U.S.A	2015	Journal of Midwifery &Women´s Health	two independent strands of qualitative and quantitative data were used	Convergent, parallel mixed-methods	473 quantitative/ 246 qualitative	Cinahl/Research gate	Mixed methods, certified nurse-midwifes, secondary traumatic stress	Determine the prevalence and severity of secondary traumatic stress, STS, in Midwifes and to explore their experiences and descriptions of attending traumatic births.	29% reported high or severe STS, 36% screened positive for PTSD due to attending traumatic births. Need of education throughout midwifery programs. Education to identify STS amongst midwifes. The midwifery profession should acknowledge STS as a professional risk
2	Bovopoulos N., Jorm A., Bond K., LaMontagne A., Reavley N., Kelly C., Kitchener B., Martin A. (2016) *Providing mental health first aid in the workplace: A Delphi consensus study*. BMC Psychology 4:41 Doi 10.1186/s40359-016-0148-x.	Austrailia	2016	BMC Psychology	Qualitative	Delphi expert consensus method.	89	PubMed	Mental health first aid, workplace, Delphi method, workplace guidelines	Develop guidelines on additional considerations that are required when offering mental health first aid in context regarding a workplace	Guidelines where created to be used in future mental health first aid training programs. The created guidelines help workers affected by mental health problems through enhancing early help seeking and recognition.
3	Creedy, D. K., Sidebotham, M., Gamble, J., Pallant, J., & Fenwick, J. (2017). Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey. BMC Pregnancy & Childbirth, 171-8.	Austrailia	2017	BMC Pregnancy and Childbirth	Cross sectional study	Online survey	1037	PubMed	Anxiety, burnout, Copenhagen Burnout Inventory, depression, midwifes, stress, survey	Investigate the burnout prevalence in a population cohort of Australian midwives with symptoms of depression, anxiety and stress	A high prevalence of moderate too severe personal and work related depression, burnout, stress and anxiety amongst Australian midwifes

	doi:10.1186/s12884-016-1212-5										
4	Halperin, O., Goldblatt, H., Noble, A., Raz, I., Zvulunov, I., & Liebergall Wischnitzer, M. (2011). Stressful Childbirth Situations: A Qualitative Study of Midwives. Journal Of Midwifery & Women's Health, 56(4), 388-394. doi:10.1111/j.1542-2011.2011.00030.x	Israel	2011	Journal of midwifery &Women´s Health	Qualitative	Individual, semi structured, in-depth interviews. Inductive data analysis	18	Cinahl/research gate	Coping strategies, midwifery, qualitative research, stressful childbirth situations, supervision	Exploration of the clinical life-threatening childbirth situations perceived as extremely stressful by the midwives and then to identify how midwifes cope with those experiences.	Several situations that effect the emotional well-being of the midwife as well as ways how midwifes regulates their emotions in order to continue their work. There is a lack of organizational support for the midwifes. It is highly important to develop innovative resources that would assist midwives in coping with complex realities.
5	Hunter, B &Warren, L. (2014. Midwifes experiences of workplace resilience. *Midwifery*, *30*(8), 926-934. Doi 10.1016/j.midw.2014.03.010	UK	2016	Midwifery	Qualitative	Two stage exploratory qualitative descriptive study	11	Science direct	Midwifes, resilience, workforce, stress, emotion	Exploration of clinical midwifes understanding of their experience of resilience by using a professional online discussion group, and then model the concept in collaboration with an expert group.	This research gives an initial insight in the midwifes experience of resilience. The results are somewhat the same as other studies about resilience. Resilience is seen as persons that are adaptable and self-aware instead of rigid thinking and hardened attitude. The resilient persons are not only effective self-careers but also need empathy and compassion for their colleagues and clients.
6	Hildingsson, I., Gamble, J., Sidebotham, M., Creedy, D., Guilliand, K., Dixon, L., Pallant, J., Fenwick, J. (2016). Midwifery Empowerment: National Surveys of Midwives from Australia, New Zealand and Sweden. *Midwifery* (40), 62-69. 10.1016/j.midw.2016.06.008	Austrailia, New Zealand, Sweden	2016	Midwifery	Qualitative	Self-administrated survey	2585 midwifes	Research gate by Debra Creedy	Midwifes, workforce attrition, professional empowerment, cross-sectional, survey	Compare midwifes sense of empowerment across Austrailia, New Zealand and Sweden using the Perceptions of Empowerment in Midwifery Scale.	A unique cross cultural understanding of midwifes sense of empowerment. It provides insight into the differences and similarities between countries regarding the theme.

7	Leinweber, J. & Rowe, H. (2010) The costs of 'being with the woman': secondary traumatic stress in midwifery. Midwifery 26 issue 1, 76-87, Elsevier. DOI: http://dx.doi.org/10.1016/j.midw.2008.04.003.	Austrailia	2010	Midwifery	Qualitative	Literature review	6 relevant articles were reviewed	Cinahl/research gate	Secondary trauma, Midwife–woman relationship, Empathy, Traumatic birth, Compassion fatigue, Woman-centered care, Post-traumatic stress disorder(PTSD)	To make a contribution to the conceptual development theory related to the dynamics of the relationship between a woman and her midwife within traumatic birth events. Stimulate debate and research into the potential for traumatic stress in care providing midwives, in and through relationships with women.	Midwifes are in high risk of STS and it needs to be acknowledged as a work related risk factor. STS leads to economical loss for the healthcare system and puts the patients' right to good care at risk.
8	Leinweber J., Creedy D., Rowe, H., Gamble J., (2017 a) Responses to birth trauma and prevalence of posttraumatic stress among Australian midwifes. Women and Birth 2017 Feb;30(1):40-45. doi: 10.1016/j.wombi.2016.06.006.	Austrailia	2017	Women and Birth/ Elsevier	Quantitative	Descriptive cross sectional survey design	687	PubMed	Midwifes, posttraumatic stress, occupational health, peritraumatic distress, obstetric violence	Explore midwifes emotional responses to witnessing different types of birth trauma and to estimate the prevalence of posttraumatic stress symptoms	17%prevalence of posttraumatic stress among midwifes. The need of trauma awareness amongst midwifes needs to be improved. Exposure to birth trauma should be acknowledged as occupational hazard
9	Leinweber J, Creedy DK, Rowe H, Gamble J. (2017 b)*A socioecological model of posttraumatic stress among Australian midwives*. Midwifery.2017;45:7–13. doi: 10.1016/j.midw.2016.12.001	Austrailia	2017	Midwifery	Descriptive cross-sectional design	Survey, questioner using different measurements' scales	578	research gate by Debra Creedy	Midwifes, trauma, posttraumatic stress, occupational health, obstetric violence, workforce attrition	Identify the personal trauma event related and workplace related variables that predict post-traumatic stress after exposure to traumatic births in Australian midwifes	There is a correlation between personal and work related trauma and the risk of post-traumatic stress. Guilt and self-blame is identified as a major risk amongst midwifes risk of post-traumatic stress.
10	Pezaro, S. (2016). The case for developing an online intervention to support midwives in work-related psychological distress. British Journal Of Midwifery, 24(11), 799-805.	UK	2016	British Journal of Midwifery	Qualitative	Literature review and two round Delphi study questionnaire	66 participants in the Delphi study, 30 papers in the literature review	PubMed	Work related psychological distress, support, interventions, online Midwifes	Make the case for the development of an online support intervention to effectively support distressed midwifes	There is a significant need for an online support for midwifes. Midwifes from all over the world shows tendencies to suffer from work related distress. Most suffer silently in the lack of adequate help or fear of stigmatization.

11	Pezaro, S., Clyne, W., Turner, A., Fulton, E., & Gerada, C. (2016). 'Midwives overboard!' inside their hearts are breaking, their makeup may be flaking but their smile still stays on. *Women and Birth*, *29*(3), e59-e66. doi: 10.1016/j.wombi.2015.10.006.	Nigeria, USA, Ireland, UK, Austrailia, France, Poland, Croatioa, Israel, Italy, Japan, Uganda, Turkey, New Zealand	2016	Women and Birth	Qualitative	Narrative literature review	30 articles included	Science direct	Midwifery, Health services, Mental health, Psychological distress, Midwifes	To review the state of psychological distress within the midwifery population from a contextual point of view.	Midwifes continue their work despite distress, using their persistence as a maladaptive coping strategy. This weakens their ability to notice psychological illness in themselves and has long going consequences on their personal lives as well as their professional confidence and well-being. This research shows that globally there is a lack of attention on the prevalence and seriousness of work related psychological distress amongst midwifes.
12	Rice H. & Warland J. (2013) Bearing witness: Midwifes experiences of witnessing traumatic birth. Midwifery 29, 1056-1063 Elsevier. DOI http://dx.doi.org/10.1016/j.midw.2012.12.003	Austrailia	2013	Midwifery	Descriptive qualitative	Semi-structured interview	10	PubMed/ research gate	Midwifes, Trauma, Vicarious traumatization, Secondary traumatic stress	Determine if the midwifes see themselves in negative psychosocial risk.	Traumatic incidents affect the midwifes work. Leads to emotional distress
13	Sheen et. al (2014). An integrative review of the impact of indirect trauma exposure in health professionals and potential issues of salience for midwives	United Kingdom	2014	Journal Of Advanced Nursing,	Integrated review	Literature review	42	Cinahl	Burnout, compassion fatigue, healthcare professionals, integrative review, midwives, posttraumatic stress, secondary traumatic stress, traumatic stress	Explore health professionals reported responses to indirect trauma and identify issues of potential salience for midwifes	Severe changes in health personnel. Shows symptoms of PTSD STS CF VT. Specially midwifes are in the risk
14	Sheen K, Spiby H., Slade P., (2015) Exposure to traumatic perinatal experiences and posttraumatic stress symptoms in midwifes: Prevalence and association with burnout	United Kingdom	2015	International Journal of Nursing studies	Quantitative	National postal survey using different measurement scales	421	PubMed	Burnout, Midwifes, trauma, post-traumatic stress	Investigation of the psychological impact of exposure to traumatic perinatal events among midwifes	33% of 421 midwifes suffered from symptoms of post-traumatic stress. Many thought about leaving their profession. Some did

15	Sheen, K., Spiby, H., & Slade, P. (2016a). The experience and impact of traumatic perinatal event experiences in midwives: A qualitative investigation. International Journal Of Nursing Studies, 5361-72. doi:10.1016/j.ijnurstu.2015.10.003	United Kingdom	2016	international Journal of Nursing studies	Qualitative	interviews	35	PubMed	Indirect exposure to trauma, midwifes, post-traumatic stress, template analysis	Provide in depth investigation in how midwifes respond into the experience, perceived impact and management	There is a need of facilitating access to support at both an organizational and personal level for midwifes. Midwifes preparedness for this aspect of practice should be considered.
16	Sheen, K., Spiby, H., & Slade, P. (2016b). What are the characteristics of perinatal events perceived to be traumatic by midwifes, Midwifery (40), 55-61.doi.org/10.1016/j.midw.2016.06.007	United Kingdom	2016	Midwifery	Quantitative	Questionnaire survey, In-depth interviews	421	Science direct	Midwifes, indirect trauma, Maternity workforce, post-traumatic stress	Investigate the characteristics of events perceived as traumatic by UK midwifes	The complex and severe events associated with midwifery can never be avoided completely but it needs to be recognized that it does affect the midwifes. The importance of services and organizations acknowledging the potential of work related trauma amongst midwifes.
17	SchrØder, K., Larsen, P., Jorgensen, J., Hjelmborg, J., Lamont, R., & Hvidt, N. (2016). Psychosocial health and well-being among obstetricians and midwifes involved in traumatic child birth. *Midwifery* (41), 45-53. http;//dx.doi.org/10.1016/j.midw.2016.07.013	Denmark	2016	Midwifery	Mixed method	National questionnaire survey and qualitative interview (data from the interviews not included in this study)	1535 Midwifes, 563 obstetricians	Elsevier	Midwifes, Obstetricians psychosocial health and well-being, second victim, secondary trauma, traumatic childbirth	To investigate the self-reported psychosocial health and well-being of Danish midwifes and obstetricians during the recent four weeks and how they recall their psychosocial health and well-being immediately following the incident and to compare these two groups.	Obstetricians reported a higher number of traumatic births. Midwifes reported a significantly higher score in COPSOQII, which measures symptoms of stress and burnout. Some had left the delivery ward partly or primarily because they felt the responsibility was too big of a burden.
18	Wahlberg, Å., Andreen Sachs, M., Bergh Johannesson, K., Hallberg, G., Jonsson, M., Skoog Svanberg, A., & Högberg, U. (2017). Self-reported exposure to severe events on the labor ward among	Sweden	2017	International Journal of Nursing studies	Cross sectional study	web survey	1459 midwifes, 706 obstetricians	PubMed	Event, Midwifes, Obstetricians, Occupational exposure, traumatic	Assess the rate of self-reported exposure of severe events among midwifes and obstetricians at a delivery ward. And what is the cumulative risk by professional years.	72% of the midwifes and 84% of the obstetricians reported experiencing one or more severe events during at their work. Making such experiences very common. One-fifth of midwifes and a third of obstetricians had been part of an event being analyzed and reported to the authorities.

	Swedish midwives and obstetricians: A cross-sectional retrospective study. *International Journal of Nursing Studies*, *65*, 8-16. 10.1016/j.ijnurstu.2016.10.009										
19	Wright, E. M. (2017). Evaluation of a web-based holistic stress reduction pilot program among nurse-midwives. Journal of Holistic Nursing, 0898010117704325. doi:10.1177/0898010117704325	USA	2017	Journal of Holistic Nursing	Cohort study	web-based program including pre- and posttest surveys	10	Cinahl	Nurses (advanced practice), group/population, meditation/mindfulness, healing modalities, yoga, stress and coping, common themes, midwifes	Description of the outcomes of a holistic, web-based, modality pilot program in order to reduce perceived stress levels and therefore improve coping skills among certified nurse-midwifes	Mindfulness yoga decreases the self-perception of stress. There was an improvement in overall coping and specific strategies that foster coping.
20	Wright, E. M., Matthai, M. T. and Warren, N. (2017), Methods for Alleviating Stress and Increasing Resilience in the Midwifery Community: A Scoping Review of the Literature. *Journal of Midwifery & Women's Health*, 62: 737–745. doi:10.1111/jmwh.12651	Uganda, Iran, UK, Israel, Australia	2017	Journal of Midwifery &Women´s Health	Qualitative	Scoping literature review	6 articles	Research gate by Erin M. Wright	coping, job satisfaction, midwifes, mindfulness-based stress reduction, resilience	To map and summarize the available literature regarding coping mechanisms for midwifes and identify conditions that promote resilience if possible	Mindfulness-based stress reduction program improves stress levels and coping skills. Midwifes have a desire for work-based programs and support by colleagues and employers for increasing their coping skills. However, there is significant gap in knowledge about which concerning which interventions improves resilience and alleviate stress in a midwifery cohort. But it is clear that regardless of location the work related stress amongst midwifes is shared.

Appendix 4. Interview structure

Interview structure (Ostrom & Wilhelmsen 2012)

1. Short introduction of the thesis, aims and how the informants' expertise is valuable for this research.
2. Informant is asked to describe their experience in the subject
3. The informant is asked to describe a specific incident from their own experience.
4. The interview end with a short discussion about the reactions that a raised from talking about the incident so that the interview ends with a conclusion for the informant.

If the informant seems anxious or upset after the interview the informant is offered a separate time for discussion.

Table 1. Table of the interview data

Interview	Gender	Years of experience	Age	current position	Pages of data	number of critical incidents mentioned	Length of interview
A	F	9	*	Delivery ward	9	9	00:58:26
B	F	36	*	Delivery ward	9	5	00:54:46
C	F	7	*	Delivery ward	12	9	01:00:19
D	F	3	*	Delivery ward	8	6	00:56:03
E	F	1	*	Delivery ward	8	5	00:45:10
F	F	7	*	Delivery ward	6	8	00:37:27
G	F	35	*	Delivery ward	10	4	01:05:58
H	F	25	*	Delivery ward	13	7	01:04:02
total	100% female	123	350	100 %	75	53	ca 7.35h
mean µ		15,375	43,75		9,375	6,625	56,88

Table 2. Incidents mentioned in the interviews

Incidents mentioned	✻	✣	✤	✥	❇	✲	✲	✻	∑
Sudden unexpected incidents									
Resuscitation/death of baby, unexpected unhealthy baby		2	1	2		3	1	1	10
Placental abruption			1						**1**
Pre-eclampsia, eclampsia, sick mother			1	2		2			**5**
Hysterectomy or major bleeding	1							1	**2**
III◦ an IV◦ tearing	1								**1**
Confusing situations	1		1		1	1			**4**
Death of mother		1	1	1				1	**4**
Still birth	1	1	2	1	1	2			**8**
Close call situations			1					1	**2**
Critical incidents related to the organization	4	1	1		1		1		**8**
Staff related	1				2		2	3	**8**
Total	**9**	**5**	**9**	**6**	**5**	**8**	**4**	**7**	**53**