

**Facilitating health professional wellbeing following
critical incidents: An action research study**

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Abstract

The impact of critical incidents on health professionals and the lack of subsequent support is a concern for me, my colleagues, and the wider service we work in. The aim of this study was *to explore how the development and evaluation of a support package could facilitate health professional wellbeing following critical incidents in National Women's Health at Auckland District Health Board*. A pragmatic approach underpinned the decision to use action research to collaboratively improve the support provided within the service. Through the project a critical incident eBook resource was created, evaluated and is now available for health professionals to use. This thesis, completed as part of the requirements for a Doctorate of Health Science, contains the story, reflections, findings and discussion of this action research study.

The literature is extensive on the frequent occurrence of critical incidents in health care and the emotional impact these have on health professionals. The term *second victim* has been developed to capture the distress that can result following an incident, with the woman (or patient) being the first victim. Although the health professional's despair is unlikely to be avoided the current literature does indicate that the response of colleagues and the organisation can make a difference to the level of distress. There is, however, limited guidance on what strategies work in the real world of the health system.

Three action research phases were undertaken in line with Coghlan and Brannick's (2014) model; Constructing and Planning Action (normally discrete, these were combined), Taking Action, and Evaluating Action. A core action group worked with me through cycles of experiencing (being attentive to the data), understanding (being intelligent), judgement (being reasonable) leading to action (being responsible). The data included organisational knowledge, group discussions, and interviews with health professionals. An initial eight interviews with health professionals were undertaken to hear their stories of what they found helpful following a critical incident. The themes from the interviews and following discussions provided chapter headings for the resource. The content was developed through multiple iterative cycles with subject experts. As part of the Evaluating Action Phase a further 11 health professionals were interviewed on the usability and the value of the tool. Changes were made and the final version was made accessible both nationally and internationally. In total 50 health

professionals were involved in the creation of the eBook as a support package to facilitate wellbeing for themselves and colleagues. The characteristics of practical knowing proposed by Coghlan (2016) are used as a framework to present the study and shape the actionable knowledge produced in the study. The outcome was that there are four characteristics found to be guiding principles for the development and evaluation of a support package to facilitate health professional wellbeing following critical incidents with National Women's Health. The characteristics are that:

- Silence is broken on the everyday effect of critical incidents through the development of the support package;
- Social construction of multiple realities within the organisation is reflected in the content of the support package;
- Uniqueness of the service and the individual is captured in the support package through iterative cycles of action and reflection; and
- Individual and collaborative concern for each other after a critical incident is present to create a support package that facilitates wellbeing.

Complexity theory and social constructionism guided the study, assisting in each of the action research phases, revealing unconscious rules that health professionals used to guide their actions. The eBook makes visible the hidden assumptions health professionals have been making about how they should behave in the organisation, behaviours that in the past have created an unsupportive environment. The process of undertaking action research in my own organisation led to learning that contributes to the field of practical knowing and the value of making change through action research.

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Finally I dedicate this doctorate wholeheartedly to my husband and best friend Luke. Never for a moment did his belief in me waiver, so positive for me to start the journey and then continually supporting me, emotionally and physically to make it happen.

Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where specifically defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Diana Austin

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INTRODUCTION

Chapter 1.

The focus of this action research study is health professional wellbeing following a critical incident. The term *critical incident* encompasses a variety of events within health care such as death, error or adverse event, emergency situation, threatening behaviour or an accumulation of smaller events. There are particular characteristics that deem an incident to be critical such as it involves trauma, fear, emotions, changed societal norms, that it is an emergency, is unexpected and limited in scope (Schwester, 2012). Any event that causes an unusually intense stress reaction can be considered critical. Often the situations unnoticed by one health professional, are considered critical by another. Most critical incidents are not obvious or striking but are experienced as critical by the way they are interpreted by the individual. As explained by Tripp (2012), an educator and researcher in the topic, “incidents happen, but critical incidents are produced by the way we look at a situation: a critical incident is an interpretation of the significance of an event” (p. 8).

The contextual influences surrounding a critical incident, particularly if it is perceived to be preventable, have led to health professionals becoming what is termed the *second victim*, the patient being the first victim. The term was introduced by Wu (2000) in relation to doctors but is applicable to other health professionals. The term encompasses the health professional’s feeling of despair following the realisation that they were involved in a critical incident, the feeling of isolation and the often seemingly unsupportive response by colleagues and the health system.

Intense responses to traumatic events were identified in a New Zealand study of 16 midwives, with emotional stress causing illnesses such as anxiety and post traumatic stress disorder (Calvert, 2011). Cox and Smythe (2011), in another New Zealand study exploring why midwives leave self employed midwifery practice, describe midwives as having a feeling of being excessively responsible for outcomes and that affects their practice. Jones’ (2012) study on a midwife’s first experience of a stillbirth again reflects the deep angst that follows such an episode of practice.

When a baby dies, there is always the question of what could have been done differently. Was the risk already there, or was this unsafe practice (Smythe, 2003). Midwives agonise over such questions in relation to their own involvement, and also in terms of how others may perceive the standard of care. The worry pervades (p. 20).

The literature is more extensive for health professional groups outside of Women's Health in relation to critical incidents. A powerful study where 20 surgeons were interviewed in Canada showed the effect on a professional group that is usually observed to be strong. In the study the surgeons shared their experiences of emotional trauma and explained it was due to them being "more sensitive and more affected than most surgeons," whereas other surgeons are "absolute rocks" (Luu et al., 2012, p. 1182). The supposed 'rocks' were then interviewed and found to have similar reactions and highlighted the misconception that they were not bothered by such incidents (Luu et al., 2012). The impact of critical incidents such as error is so significant that suicidal ideation, in relation to the error, was present during the previous 12 months for 501(6.3%) in a study of 7905 surgeons (Shanafelt et al., 2011). For midwives in Young's (2011) study a complicated birth where there was a possibility that a baby would die contributed to burnout. The evidence is convincing, all health professionals are affected by critical incidents or something going wrong and can be considered to suffer as the second victim. The trauma can be unresolved leading to questioning, suicidal ideation and burnout.

After a critical incident there is an emotional need and a desire to understand what has happened so learning can occur, as well as a practical need (Ullström, Andreen Sachs, Hansson, Ovretveit, & Brommels, 2014). Inadequate support and a lack of a clear investigation seem to deepen and prolong the impact. Ullström and colleagues' (2014) findings confirm that "patients and professionals may be affected in two ways after an adverse event: first, by the incident itself, and second, by the manner in which the incident is handled (p. 329). There are a variety of strategies promoted to support the second victim, however all have their limitations, and little evidence to support their effectiveness (Seys et al., 2013). Due to an underdeveloped body of knowledge, health care organisations searching for blueprints to establish support systems are potentially looking in vain.

This chapter will provide the story behind why lack of support systems is important to me, my personal journey, the context in which the study was undertaken and the rationale for choosing action research to address the issue. In establishing context, I also outline the motivation for this study which moves beyond the personal. I begin with explaining the aim of the study and research approach, before outlining the impetus for, and background to the study.

1.1 Aim of the study

Despite numerous studies finding that health professionals are significantly impacted by critical incidents, much less scholarly attention has been given to understanding how effective support might be offered to health professionals following a critical incident. In connecting personally with this topic, and seeing a need within my organisation, I also sought to fill this gap in the literature in designing the intent of my study. My aim was to: *Explore how the development and evaluation of a support package could facilitate health professional wellbeing following a critical incident in National Women's Health* where I worked. To achieve this, an understanding was required of how it is for health practitioners currently within the study area and what they would find helpful. Together with other health professionals in the service I planned to develop a support package that would be relevant to the needs in practice. This study forms part of a Doctorate of Health Science, a degree with a strong focus on practice. Action research was the methodology selected to achieve the aim and will be explained in the next section.

1.2 Research approach

Following the decision to complete a Doctorate I started with an exploration of a possible research methodology before the topic was clear. I focused on implementation science as I had an underlying fear that my research might not bring about change. Improvement is core to who I am. I have evolved from an upbringing where getting a job done was valued. This is a challenging belief system with which I have continued to internally battle due to the high personal expectations I place on myself. I approached the research with a world view that improvement was equivalent to physically completing an activity. While exploring methodologies the area of concern became clearer. The topic was identified, as outlined in the previous paragraphs, and a research aim developed. Action research provided a methodology that explored practice with the

purpose of improving, while also working collaboratively with others who want to change. Through action research a practical knowing is developed that is “embodied in the moment-to moment action of each research/practitioner, in the service of human flourishing and the flourishing of the ecosystems of which we are a part” (P. Reason & Torbert, 2001, p. 7).

Although there are many definitions of action research Bradbury (2015b) states that action researchers, “...draw on and contribute to an ever-increasing repertoire of experiential practices at personal, interpersonal, and/or collective levels, allowing us to address complex problems while also giving attention to coordinating needed action” (p. 1). The specific approach adopted for this action research is that of Coghlan and Brannick (2014) who provide a methodology for doing action research in your own organisation, based on a general empirical method. It involves a four phase model (Constructing, Planning Action, Taking Action, and Evaluating Action) within which there are cycles of experiencing, understanding, judging and taking action. Coghlan’s (2016) philosophy of practical knowing is used to frame the learning at first, second and third level. Chapter 4 further expands the methodology and Chapter 5 the specific methods used.

Underpinning the approach is pragmatism and in particular I have used the work of John Dewey. Dewey’s philosophy is that knowledge is gained through studying problems in their natural environment, so that required modifications can be identified and then evaluated, an approach that has similarities to insider action research.

Every gain in natural science makes possible new aims. That is, the discovery of how things do occur makes it possible to conceive of their happening at will, and gives us a start on selecting and combing the conditions, the means, to command their happening (Dewey, 1922/2002, p. 235).

Alongside pragmatism, complexity theory and social constructionism provide concepts that help make sense of the data gathered in the study and how change can be enacted in the service. Complexity theory views a system as more than the individual components or in this study the health professionals. Understanding occurs through knowing the interactions between the health professionals and other staff; “to understand life means knowing, not just the components, but also the way the components are organized into systems that interact with their environments, including other systems” (Greenwood,

2015, p. 427). Action research as a methodology involves collaboration and connections with others as co-researchers and co-participants that has an understanding of inter-relationships at its core and is influenced by social constructionism (Bradbury, 2015b; Coghlan & Brannick, 2014; Heron, 1996). In social constructionism meaning is understood through shared assumptions about what is reality. Knowledge is constructed through interaction with others (Andrews, 2012). Pragmatism, as the philosophical underpinning for the study and action research methodology is explored further in Chapter 4. Complexity theory and social constructionism are examined within the literature review in relation to critical incidents, what is helpful for health professionals and their application to change within practice.

1.3 Impetus for the study

An initial trigger for this study came from my experience recounted below:

While undertaking a performance appraisal for a fellow midwife I found that she was still anxious and wanting information about a critical incident that occurred eight months previously. A belated debriefing was organised for the midwife and another health professional involved. During the meeting it was found that they were both distressed by many aspects of the situation, including how they were first informed about it occurring, communication to family and the outcome of the review. A safe and transparent system for supporting individual staff members was not in place (D. Austin, personal communication, 2012).

This experience and ongoing reflections about what was happening in my work environment when colleagues or I were involved in critical incidents within National Women's Health led me to make further explorations. At the time of the study the Auckland District Health Board (ADHB) process following critical incidents was guided by the Critical Incident Stress Management policy (Auckland District Health Board, 2014a) which states that staff should receive immediate defusing after an event followed by the opportunity for debriefing. The aim is to reduce cumulative stress reactions. Anecdotal evidence inferred that the policy was not being consistently followed and sometimes when debriefing had been provided it was not meeting the needs of those involved.

In 2012 I had the opportunity to be involved in creating and analysing an informal survey for maternity practitioners related to their experiences of being involved in critical incidents. It showed that of the fifty four participants, forty (74%) had been

involved in a critical incident in the past two years. Of these five had indicated they had received debriefing and a further 12 had 'partial' debriefing, leaving 23 (43%) who had no debriefing. All but one of those that selected 'partial' did so as they had received informal support / communication with colleagues. Thematic analysis of the participants' data reflected an unmet need that appeared to be having a significant impact on individual staff. The data indicated that there was no formal process in place to offer support for staff and at that time support occurred on an ad hoc basis with most staff not receiving any after a critical incident. Respondents to the survey also identified missed opportunities for service improvement and learning following an incident (Austin & Haultain, 2012).

Following the survey findings the National Women's Health Clinical Governance group at ADHB approved a project to be put in place to improve the support for health professionals, particularly in the area of debriefing, and that a working group be set up. Alongside the tasks of the working group I proposed that I also undertake a research project as part of my Doctorate. A workshop was held to discuss the concerns on debriefing and support in general as part of a regular joint anaesthesia and obstetric morbidity meeting. The same messages were expressed as those from the survey and there was a commitment to improvement. The multiple sources of evidence within the organisation indicated there was a widespread concern and desire to improve the organisation's response to critical incidents.

1.4 Personal background to the study

The event described in the previous section and the subsequent survey felt like the starting point for the research topic definition however on reflection they are more correctly key moments in a long journey as a health practitioner. As I tell my story I am aware that my experiences have affected the lens through which I see the research topic. The pre-understandings and assumptions that I bring to the study will be explored further in this next section.

I started my health career as a nursing student in 1985. Congruent with my nature I tried hard to do well and worked with the underlying premise that I wanted the best for the patients I worked with. When I was about two years into the training I was working in Older Peoples' Health. An elderly woman was being rehabilitated and I was following her as she worked with the various disciplines. When with the physiotherapist I was

advised not to hold the woman's walking belt (to prevent falling) as I had been but to just stand next to her. When walking together that afternoon the woman fell and broke her collarbone, setting back her rehabilitation significantly. The nursing staff would not speak to me and I can still see the disapproving glare of the woman and her family. I was labelled a terrible student. When I sobbed with the nursing lecturer I was told to harden up. The most upsetting part in the story was that it was while trying to be a 'good' nursing student and follow the physiotherapist's instructions that I received this label. Nobody ever asked or heard why I was not holding the walking belt.

A two year Volunteer Service Abroad contract took my husband and me to the Solomon Islands. The perception of critical incidents, such as a death or adverse event, was perceived through a contrasting lens. A nurse went home one night for her break and fell asleep. When she arrived back in the morning a child had died, potentially unnecessarily. The family accepted the death and there was no questioning of the nurse's actions. They had attributed the cause of death to a disagreement they had at the time with their relatives back in the village. I found I had a sense of freedom that I or anyone else was not going to be blamed (and guilt for liking that freedom). At the same time I thought there needed to be more accountability by health professionals for their actions as was expected in my New Zealand work context.

In 1994 I completed a Diploma in Midwifery and entered a climate where individual health professional accountability is high within the health system and the wider society. Following this I took on quality improvement roles in National Women's Health and across other disciplines. For several years I was the coordinator for adverse events for ADHB and implemented the national management of health care incidents policy into the organisation. In this role I knew of all the reported serious harm events that occurred, the near misses and the high risk areas. From this position I moved back into clinical work both nervous and delighted to be working with women and their families again. The following description of my thoughts was published in an article written when I was preparing this research study:

When I returned to midwifery practice several years ago, I was scared. What if I made a mistake? Having previously worked in Quality Improvement I was aware of the many safety processes and best practices to prevent harm but sometimes I ran out of time or was distracted and 'forgot' to do them. I found myself taking

the less than ideal moments of the day home, to replay, to wonder if I was good enough to still be a midwife. I thought I would have grown out of this behaviour by now, but I haven't. The dread of something I've done (or left undone) stays with me. As I open up this conversation with others, I find they too are scared. They too struggle to make peace with memories of moments that others label as 'adverse events' (Austin, Smythe, & Jull, 2014, p. 9).

So with reflection the concern that led to the study aim came from my background in managing the review of critical incidents, my personal experiences and stories from colleagues. A trigger moment occurred with the specific story of a colleague who experienced a critical incident, as recounted on page 5, that highlighted those simple, practical measures that could have reduced the distress for the midwife. There was a tangible opportunity to make a difference.

1.5 The study context – Auckland District Health Board

Auckland District Health Board (ADHB) is based in central Auckland and serves a population of 482,015 (Ministry of Health, 2015). National Women's Health is situated within ADHB and includes maternity, gynaecological, fertility and newborn services for the Auckland population as well as being a referral centre nationally. At the beginning of the study there were 463 staff (allied health professionals, administrative staff, junior doctors, midwives, nurses, specialist medical officers, and technical staff) (Auckland District Health Board, 2015b). Lead Maternity Carers (LMCs), who are self employed doctors or midwives working in the community, also access the facility to provide maternity care.

National Women's Health is led by the Women's Health Director. The next level in the line management includes the Allied Health Director, General Manager, Midwifery Director, and Primary Care Director. Each of the five areas within the service are managed by a Service Clinical Director, four of which are medical doctors and one a midwife (Auckland District Health Board, 2016b). The five Service Clinical Directors have joint management and clinical roles. The clinical staff report to the Charge Midwives or Team Leaders for the respective wards and clinics. The action research group and participants represented each of the levels outlined above. I reported to a Charge Midwife and also the Midwifery Director for my two roles as an insider in the organisation. The specifics of my positionality will be expanded in the next section.

1.6 Insider / outsider research

Positionality is where the researcher sits in relation to the participants and the researcher's role in the study setting. Throughout the research process there was a blurring and a gliding between the boundaries of insider and outsider that is important to analyse and make explicit (Coghlan & Brannick, 2014; Herr & Anderson, 2015). Table 1 summaries the roles and changes throughout the research period. As the idea of the study unfolded I was working in the clinical area of National Women's Health as a midwife and working as a midwifery lecturer for Auckland University of Technology (AUT), the University in which I am undertaking the Doctorate. Although an insider, who was about to undertake a study with colleagues, I was also an outsider as I was employed as a lecturer at AUT. I had employment options many of my midwifery colleagues did not have and the completion of the study was potentially furthering those options. The study would not have been initiated by me if I had not held the outsider role. As Herr and Anderson (2015, p. 49) suggest, "insiders are often too busy to be full participants, and seldom do the incentive structures of organizations - other than universities - reward research." I had previously had a variety of experiences in quality improvement roles and research throughout ADHB that required interaction with senior management. I knew the contacts and systems within the organisation that would make the research path easier to traverse. When my employment role labelled me as an insider the nature of my past and adjacent role created a difference with my colleagues.

There was a shift when I took on a one year secondment from the clinical role to work as the Clinical Governance Coordinator at the study facility. This role involved the management of reviews and learning from critical incidents and complaints. I was working more closely with the subject matter of the study and in closer contact with management who needed to provide the approval to progress. I was an insider in the organisation but no longer working alongside my midwifery colleagues. I reported to the Midwifery Director, rather than the Charge Midwife as I had previously. However the study was not only for midwives. The Clinical Governance role was more in line with many of the other multidisciplinary health professionals in the action group. The group had attracted those who had joint management and clinical roles through the practicalities of being able to attend meetings and be paid for that time. There was a further change when I was offered increased hours at AUT and a Programme Leader role for the midwifery programme. I was unable to return to the permanent clinical

midwifery role with the reduced hours so joined the midwifery bureau. I had moved more to an outsider working in collaboration with insiders, while still literally keeping a toe in the door. Yet I still felt I belonged at ADHB.

Table 1. Summary of stages of study and employment roles – my positionality

Stage of study	Role at ADHB	Role at AUT
Enrolled in Doctorate (Jan 2013) Proposal prepared & PGR9 submission (June 2014)	Core Midwife 0.4	Lecturer 0.6
PGR9 accepted (Aug 2014) Ethics approval (Oct 2014) Phase 1: Constructing and Planning Action (Nov 2014 - July 2015)	Clinical Governance Coordinator 0.4 (June 2014 – June 2015)	Lecturer 0.6
Phase 2: Taking Action (July 2015 – Nov 2015)	Bureau Casual Midwife (June 2015 – February 2017)	Lecturer 0.8 & Programme Leader
Phase 3: Evaluating Action (Nov 2015 – Aug 2016)	Bureau Casual Midwife (June 2015 – February 2017)	Lecturer 0.8 & Programme Leader

My positionality is both insider and outsider; therefore both perspectives will be addressed throughout the study. Bradbury (2015b) describes the insider action researcher as placing “themselves in inherently political and frequently contradictory roles as they play ‘the irreverent inmate’ – one who is both a supporter of the people in the organizations yet is also, ‘a saboteur of the organizations rituals and is a questioner of some of its beliefs’” (p. 16). There were times that I related well to this statement; however other times my insider perspective clouded my analysis in justification of the status quo. Another metaphor used by Coghlan and Brannick (2014, p. 177) is of the “actor-director in the ‘swampy lowlands’ of their own organization.” This analogy captures the ongoing struggle of maintaining collaboration with my colleagues yet leading the research. The team were keen to work with me yet if I withdrew my direction the show would not have gone on. Travel through a swamp in the lowlands is slow and difficult with each step requiring careful navigation. Maintaining clarity on my insider positionality required such attention to detail.

1.7 Pre-understandings

Working within the organisation of study provides both inside information of the systems, politics, culture as well as specific knowledge of the roles I held during the

study. The study builds on this knowledge as well as being influenced by it. Making my pre-understandings clear is essential for the validity of the study. The participants also bring their own assumptions to the research, although more difficult to identify they come to the floor during collaborative discussion. To assist in capturing these I have kept a journal during each stage. The pre-understandings from first, second and third person are outlined.

1.7.1 First person

My roles have been outlined above and I have located my positionality as predominantly insider but what is the knowledge that I bring to the study from this position and my history? Following completion of the proposal and prior to starting the study I completed a pre-understandings interview with my supervisors. Continuing the analogy of acting Coghlan and Brannick (2014) align the insider position as being 'backstage' and includes all the insider information that can be gathered while working behind the scenes. They talk of being able to move freely without drawing attention within the organisation which was a reality for me. I was able to pop into people's offices to plan the next meeting, gather feedback on proposed action and knew when and how to do this with most effect. The drawback was that I made assumptions on individual's willingness to engage in the project based on my internal knowledge. Although all were invited I approached those more readily with whom I already had a more comfortable relationship.

Knowing the intricacies of the organisation's culture and ways of doing things can lead an insider researcher to presume they understand without enquiring to the level an external researcher would (Coghlan & Brannick, 2014; McNiff, 2013). As I reflected on the conversations I had with individuals I recognised this phenomenon occurring. I provided acknowledgement and agreement before they had sometimes finished their story. By listening to the initial transcripts I was able to modify my behaviour and 'hold back' however I was still interpreting what the participants were saying through my own perception of the organisation. Rather than pretending I was neutral, I was able to acknowledge my assumptions and continue to question how they affected my interpretation of the data throughout the project and writing of the thesis.

The management of critical incidents, particularly adverse events, has been a significant part of my career as a health professional. Despite an espoused systems approach to

preventing adverse events the common discourse assumed blame for the individual. My own experience of working as a midwife supported the incongruence. Fear of making a mistake and being blamed continues to worry me despite being key to implementing a national policy within ADHB on the management of critical incidents using a systems approach. These thoughts feel like hypocrisy to the message I have and continue to verbalise. There are limitations of education and policy in changing the culture in a large organisation. Alongside the internal hypocrisy is the knowledge that no matter how hard I 'try' I struggle to provide the care I believe is best. Time, resources, expectations, interrelationships and many other aspects outside my control influence the care I provide. The variables interact and seem to produce an outcome outside my control. Some days providing good care seems easy and in other moments it seems impossible.

1.7.2 Second person

Second person research refers to the collective data gathering, making sense of that data and decision making that takes place in the study within the action group. Each of the participants in the study brought their own pre-understandings that will have influenced the study. Identifying these however is more difficult. Participants were not asked to identify these at the beginning of the study and this created a limitation that was made explicit throughout the study. However, some underlying assumptions became apparent in the first action group meeting such as that support was better in the past, or in another country and support needs varied depending on what professional group they belonged to. For me to identify other people's pre-understandings however is at risk of being influenced by my own lens. As stated by McNiff (2013, p. 105), "only they can monitor their thinking." The use of an external facilitator can promote a deeper awareness of assumptions that are at play in the study. Although I did not formally engage such services the involvement of the Lead Maternity Carers provided a view outside the hospital system. This group of practitioners are self employed but use the maternity facility for their women to birth. Their feedback on the resource, developed through the study, identified a bias towards hospital employed staff and information appeared to them to have been developed through that lens. The action research group were able to be responsive and make changes. My Doctoral supervisors were also able to provide critique on the assumptions I was making about others throughout the study.

1.7.3 Third person

Through the study practical knowledge has been developed that connects with how it is in practice for health professionals in the aftermath of critical incidents and how the development and evaluation of a support package could facilitate health professional wellbeing within our own organisation. This knowledge is linked with existing theory and knowledge of critical incidents that is explored in the literature review, and contributes to practical knowing in action research. The characteristics of practical knowing are highlighted using the framework provided by Coghlan (2016) and include;

1. Practical knowing is focused on the everyday concerns of human living;
2. Practical knowing is socially derived and constructed;
3. Practical knowing requires attentiveness to the uniqueness in each situation; and
4. Practical action is driven by values and is fundamentally ethical (p. 6).

These characteristics are based on the work of philosophers such as Aristotle, Dewey, and Heron (Dewey, 1938b; Eikeland, 1997/2006; Heron, 1996). These will be unpacked in detail throughout the study.

1.8 Phases of action cycles

The study consisted of three phases; Constructing and Planning Action (A), Taking Action (B) and Evaluating Action (C). In Coghlan and Brannick's (2014) model Constructing and Planning Action are described as discrete phases however in this study they were combined as their purposes overlapped. This was also noted to have occurred in Ferkins and colleagues' (2009) action research study using the same model. The phases include a varying number of action cycles. Each cycle consists of a series of steps; experiencing, understanding, judging and taking action as guided by Coghlan and Brannick's (2014) method of action research. However, rarely are action cycles even, with smaller cycles occurring alongside and within other cycles throughout each phase (McNiff, 2013). The phases are set upon the content (study topic), premise (my assumptions) and the action research process itself. The following diagram summarises the three phases undertaken within this action research study and a brief summary of each phase provided.

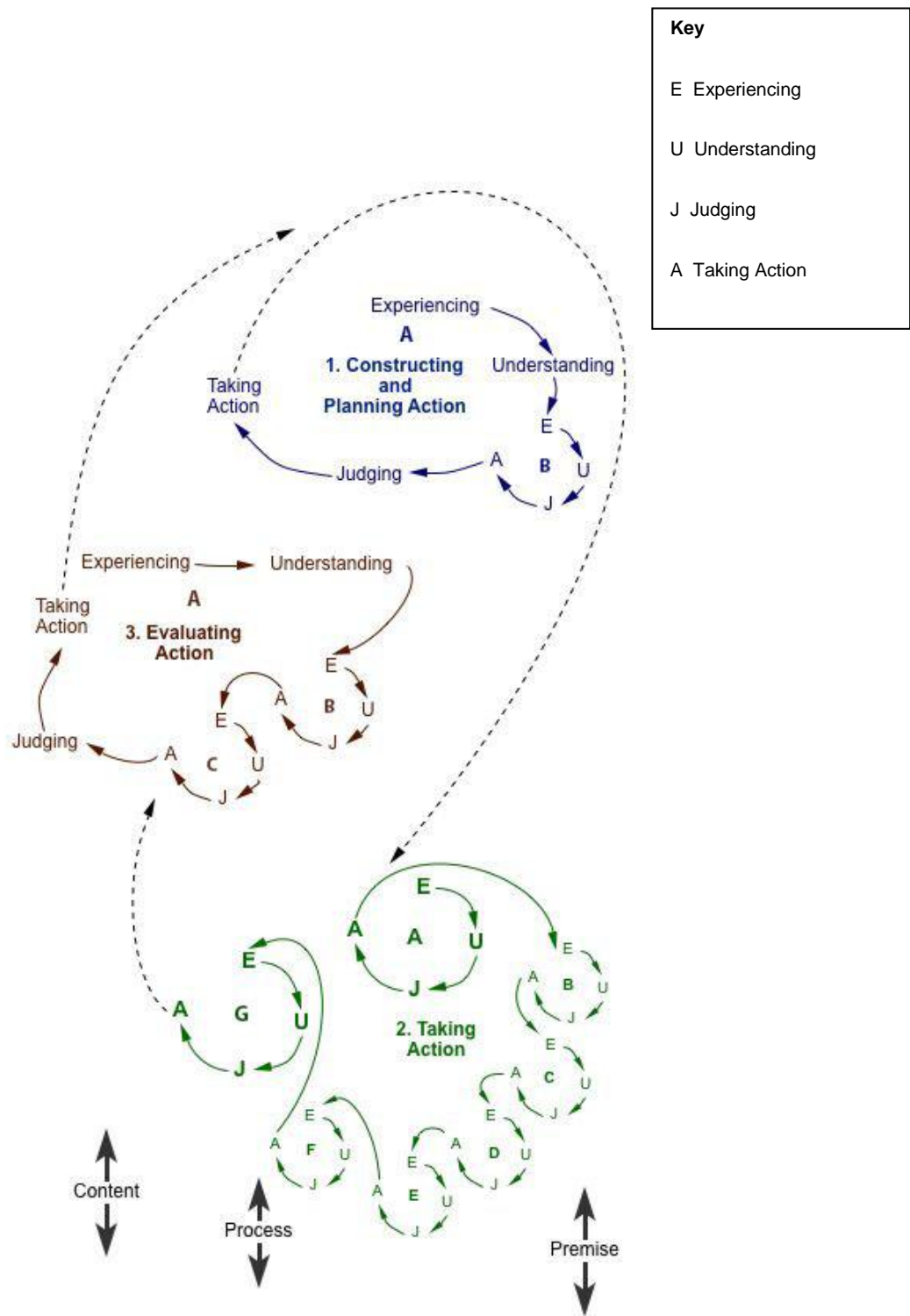


Figure 1. Three phases of action cycles undertaken in this study, based on the General Empirical Method (Coghlan & Brannick, 2014)

Phase 1 – Constructing and Planning Action

The aim of this phase was for the action group to develop a clear consensus on the problem area within the service that needed addressing or, in other words, ‘construction of the issue’. As part of this process, the participants also identified and planned for what could be helpful for health professionals following a critical incident. This was achieved through individual interviews, discussion in the action group and review of the literature. A complexity theory lens was used to understand the system and the interactions within it which underpinned the decisions for change.

Phase 2 – Taking Action

Phase 1 culminated in the decision to develop an electronic resource or eBook with embedded stories from health professionals, information that addressed the identified concerns and contacts for gaining further support. This phase consisted of me working with content experts and the action group to create the resource.

Phase 3 - Evaluating Action

The decision at the end of Phase 2 was to formally evaluate the eBook with health professionals who would potentially use the resource. Revisions were made to the content in response to feedback. The resulting eBook was launched and placed on the local organisation website for all health professionals to access both internally and externally.

In total 50 professionals were involved in the action research process. The detailed description of the cycles within each phase and the change and learning that occurred through the process of action and reflection is the focus of this thesis.

1.9 Terminology

During the thesis I have used the first person to describe myself, the researcher. ‘We’ or ‘our’ is used to refer to joint discussions and decisions that relates to myself and the participants in the action group meetings. The study involved more women than men and to protect the anonymity of all participants only feminine terminology has been used. The quotes have not been linked to any specific health professional group for the same reason. Although some participants thought there were differences in ability to

cope or manage critical incidents there was no evidence of this in the individual interviews or in the literature reviewed. This aspect is explored in more depth in the study.

To add clarity of reading, the quotes from the participants are in italics and indented regardless of the number of words. They have been presented verbatim apart from minor changes to improve clarity or remove extraneous words.

The study aim is presented in italics throughout the study for emphasis.

The following list provides meanings for the common terms used in the study.

Health Professional is the term used to encompass all practitioners with a clinical qualification working in any health setting such as community, clinic or hospital and either employed or self-employed. The multidisciplinary groups included in this study are allied health, medical, midwifery and nursing.

Lead Maternity Carer (LMC) is a doctor or midwife who provides maternity care for women while pregnant, during labour and birth and for 4 – 6 weeks after their baby is born. Women can choose who provides their maternity care (Ministry of Health, 2016a). In this study it is used to refer to midwives or doctors who are self-employed in this role.

Staff are employees of the District Health Board. They may be administrators, auxiliary, health professionals or management personnel.

National Women's Health (NWH) is used to refer to the service within Auckland District Health Board where the study took place. It includes services for fertility, gynaecology, maternity, and newborn for the central Auckland area and as a referral centre for New Zealand. In the thesis there is discussion relating to the general area of women's health care. When doing so lower case is used, clearly differentiating from the specific referral to National Women's Health where the study took place.

A glossary of terms is provided in Appendix D.

1.10 Overview of the thesis

The thesis is presented in three parts: Literature Review; Methodology and Approach; and Findings and Discussion with an Introduction and Conclusions chapter. Each chapter is framed using headings that are based on Coghlan's (2016) characteristics of practical knowing and includes: critical incidents as an everyday concern for health professionals, social construction of critical incidents, uniqueness of women's health and upholding good action following critical incidents. The table below is an outline of the chapters within each part of the thesis followed by a summary of the content of each chapter.

Table 2. Outline of thesis

Part	Chapter
Introduction	Chapter 1 Introduction
Part I Literature Review	Chapter 2 Critical Incidents - Everyday Concern and Socially Constructed Responses
	Chapter 3 Support - Unique to Women's Health and Change Needed in Practice
Part II Methodology and Approach	Chapter 4 Research Action - Underpinnings and Characteristics
	Chapter 5 Creating Change in Practice – Method of Action Research
Part III Findings and Discussion	Chapter 6 Constructing and Planning Action – Aftermath of Critical Incidents
	Chapter 7 Taking Action – Creating an Interactive eBook
	Chapter 8 Evaluating Action – Evaluation of eBook in Practice
Conclusions	Chapter 9 Contribution to learning and change in practice

Introduction

Chapter one: Introduction introduces the study and provides a background to the impetus for the chosen topic. A brief overview of the action research methodology and the phases undertaken is outlined.

Part I: The review of the literature includes an evaluation of the previous research, along with the theoretical contributions to the topic and study. It is divided in two parts and includes the following two chapters.

Chapter 2: Critical Incidents -Everyday Concern and Socially Constructed Responses

The first of the two reviews contains the literature that explores what is a critical incident, causation theories for poor outcomes, the application of complexity theory and the significant impact on health professionals. The structure of the review is framed to show the everydayness or common occurrence of critical incidents for health professionals and secondly how the experience of critical incidents and the subsequent response of those around is socially constructed.

Chapter 3: Support – Unique to Women’s Health and Change Needed in Practice

The second review builds on the previous with literature that demonstrates the unique needs of health professionals working in women’s health and the limitations of the strategies for support currently available after a critical incident. A strong argument is provided for the improvement of support as a good and ethical responsibility for me as a researcher in collaboration with my colleagues. Action research is introduced as an instrument for change that could facilitate wellbeing in the aftermath of critical incidents and address the current gap in evidence of effective support strategies.

Part II: The methodology and approach of the study is covered in the following two chapters.

Chapter 4: Researching Action – Underpinnings and Characteristics explores the methodology of this action research study. The roots of action research are reviewed in relation to its contribution to practical knowing. Pragmatism underpins the study as solutions to everyday problems in practice are sought. The principles of action research and the characteristics of practical knowing, as proposed by Coghlan (2016), are linked and presented as a framework on which the research is structured.

Chapter 5: Creating Change in Practice – Method of Action Research outlines the specific method of action research used in the study. The General Empirical Method, as proposed by Coghlan and Brannick (2014) for insider action research is described. The sections in this chapter describe the way the common understanding of the issue was achieved, the attention to the participants and their construction of that understanding, the action cycles undertaken within each phase and how ethical action research was demonstrated.

Part III: The findings and discussion from the action research is included in the following three chapters.

Chapter 6 Phase 1: Constructing and Planning Action – Aftermath of Critical Incidents is the first of the findings chapters. It describes the two cycles undertaken in Phase 1: Construction and Taking Action. The data provides insights into the complex system in the aftermath of critical incidents and the unconscious rules from a complexity perspective that govern behaviour, behaviour that creates an unsupportive environment. The phase culminates with the decision to take action in the form of an interactive electronic resource, with the aim that through its development health professional wellbeing might be facilitated.

Chapter 7 Phase 2: Taking Action – Creating an Interactive eBook included seven cycles to create the content of the eBook; two main cycles and five mini-cycles. The resource was developed to make visible the effect of critical incidents for health professionals. To stimulate a change in behaviours and meet the needs identified in Phase 1 the existing unsupportive rules that guided actions were rewritten through working collaboratively in developing the eBook. The phase concluded with the decision to take action through an evaluation of the resource.

Chapter 8 Phase 3: Evaluating Action – Evaluation of eBook in Practice is the evaluation of the eBook with health professionals in practice. One main cycle with two embedded cycles were undertaken to identify and make changes to the usability of the tool and its content. Through the cycles in this chapter it is evident that the development and evaluation of a support package can facilitate health professional wellbeing following a critical incident. The final step of Taking Action in this phase is the launch of the eBook and its availability on the web for all health professionals, both within the service and wider.

Conclusions

Chapter 9: Conclusions provides a summary of the changes to practice and the contribution to learning through this action research study. A practical knowing of how the development and evaluation of a support package can facilitate health professional wellbeing following critical incidents within National Women's Health at Auckland

District Health Board is demonstrated. Limitations to the study and future areas for research are outlined.

The completed electronic resource can be accessed via the link provided here

<http://nationalwomenshealth.adhb.govt.nz/health-professionals/critical-incident-e-book> .

It can also be accessed by searching 'Critical incident eBook' through an internet browser (Austin & National Women's Health Auckland District Health Board, 2016b).

1.11 Conclusion

The introductory chapter has provided a background to me as the researcher, the research topic, the organisation in which the study took place, and why it is important to pursue this study. An overview is presented of the research methodology and its underpinnings of pragmatism, along with complexity theory and social constructionism which are used to make sense of the findings. Three phases of action cycles are outlined that focus on addressing the research aim;

To explore how the development and evaluation of a support package could facilitate health professional wellbeing following a critical incident in National Women's Health.

The following chapters unpack an action research journey of change and learning to facilitate health professional wellbeing following critical incidents within National Women's Health at Auckland District Health Board.

PART I – LITERATURE REVIEW

Chapter 2. Critical Incidents – Everyday Concern and Reactions Socially Constructed

An exploration of the literature uncovers evidence of the major effects of critical incidents on health professionals from a wide range of groups and settings. The review is presented in two chapters. The first is Chapter 2: Critical Incidents – Everyday Concern and Reactions Socially Constructed which examines in depth what encompasses a critical incident and the impact these have on health professionals from a variety of studies indicating their everydayness in the reality of providing care. The harm caused to women and their families is distressing for them but also has a significant impact on the care providers. Specific data is reviewed relating to National Women’s Health within Auckland District Health Board (ADHB) where the study was undertaken. The reality of health professionals’ responses to critical incidents is socially constructed; an argument that is supported by examining theories of causation and social constructionism. Complexity theory is also explored in depth as a perspective that captures the unpredictability of practice and informs areas for change.

The second part of the literature review is covered in Chapter 3: Support – Unique to Women’s Health and Change Needed in Practice. The uniqueness of health professional needs and the limited evidence of what has shown to be helpful to them following a critical incident is captured. Although the distress may not be able to be removed it is potentially made worse by the response of the organisation and those around. The review points to a gap in the literature of what works in practice for health professionals in general and specifically in the women’s health setting. In the final section of Chapter 3, action research is signalled as a methodology that can create positive improvement that is ethical, and contributes to the practical knowing of what works in practice to support wellbeing when critical incidents occur in National Women’s Health. Characteristics of practical knowing are that it is relevant to everyday practice, is socially derived and constructed, unique to the specific area of practice, and based on good, ethical values (Coghlan 2016). (The underpinnings of practical knowing and further explanation of these characteristics are provided in Chapter 4). The literature review provides insight into what is already known in relation to the characteristics of

practice in the aftermath of critical incidents and therefore the review included in Chapters 2 and 3 is framed with these characteristics integrated as section headings as below:

2.2 Critical incidents – an everyday concern for health professionals;

2.3 Social construction of critical incidents;

3.1 Uniqueness of working in women’s health; and

3.2 Upholding good action following critical incidents.

2.1 Method of literature review

The literature review has been extensive throughout the duration of the study; including the research proposal, the action cycles and writing up of the findings. The nature of action research means that new areas that required an exploration of the literature evolved throughout the study. New research was published that also explores support strategies in women’s health during the study period indicating the developing concern for health professionals (Pezaro, Clyne, Turner, Fulton, & Gerada, 2016). Critical incidents encompass a wide range of events and vary according to the setting. The focus of this study is incidents that involve the provision of care for women and their babies within the health care environment. Events that could also affect health professionals such as natural disasters, interpersonal conflict, bullying or personal trauma were reviewed initially for their relevance to study. The literature review was then refined to only those related to care provision as the latter was found to have a specific type of reaction for the health professional that differed from other types of events and therefore required a more focused approach. This focus included the terms adverse events, error, mistakes, preventability and harm. Throughout the literature review the term *critical incident* is used unless the research or data specifically pertains to a particular type of event.

The literature primarily used research studies published in the last 10 years that explored critical incidents relating to patient care. However a mixture of older and recent literature was used when exploring some concepts relating to the study topic. In National Women’s Health at ADHB patients are referred to as women, and babies or newborns as the focus is on the normal life experience of birth rather than a model of sickness. However, many studies in other facilities or areas of health care use the term

patient and thus that term also required searching in the literature. International and local research was used. The majority of large studies were international with smaller qualitative studies undertaken in New Zealand. All were included as they captured the extensiveness of the impact of critical incidents.

With the above focus multiple databases were searched (CINAHL, MEDLINE, Cochrane, and PsychInfo) and from these further studies were found in the reference lists. Relevant methodological journals were also searched for examples of similar studies and guidance on methods relevant for insider research such as the *Action Research Journals*, *Evaluation*, and *Implementation Science* and specific professional journals. Alerts were set up for key terms and lists of new articles emailed weekly. Connections were made on Research Gate and articles shared with fellow researchers interested in similar issues.

2.2 Critical incidents – an everyday concern for health professionals

The term *critical incident* encompasses a variety of events within health care such as death, error or adverse event, or an emergency situation. It can also be an accumulation of smaller events or any situation that causes an unusually intense stress reaction (Schwester, 2012). This section will expand on what is a critical incident and their frequency in practice for health professionals. The nature of their effect on individuals will be examined in depth.

2.2.1 Defining critical incidents and their likelihood

Critical, as an adjective, is defined by the Collins English Dictionary (2016) as “of or forming a crisis”, a crisis being a “situation in which something or someone is affected by one or more very serious problems.” The word critical originated from the Latin word ‘criticus’ in the 16th Century and related to the “crisis of a disease” (Critical, 2017) or “of the nature of a crisis” (Critical, 2016). An incident is a “distinct or definite occurrence; event” (Collins English Dictionary, 2016).

The New Zealand Ministry of Health (2016b) on its webpage for reporting critical incidents defines a critical incident as;

Any sudden and/or unusual event which could:

- be life threatening for the client or others,

- be dangerous, with the client at risk of grave harm,
- have significant consequences like the client being involved in criminal activity, absconding, or requiring emergency services or hospitalisation (para 2).

Critical incidents are defined in the local Auckland District Health Board policy, Critical Incident Stress Management, as “a sudden, unexpected event which has the potential to cause disruption to routines and functioning, and create a significant level of stress for those involved (Tunnecliffe, M. 2001)” (Auckland District Health Board, 2014a, p. 3). As stated in Chapter 1 there are particular characteristics of an incident that are perceived as critical such as it involves social trauma, fear, emotions, changes to societal norms, and that it is an emergency, is unexpected and are usually limited in scope (Schwester, 2012). The experience of the individual is key to defining what is critical (Tripp, 2012). I have focused this study by defining critical incidents as those that occurred during the provision of health care. These included both expected and unexpected outcomes, actions or inactions that caused harm or near misses, one major event or multiple smaller events. The types of events are explored in detail and the examples of post partum haemorrhage, severe morbidity and mortality are used to demonstrate the extensive exposure for the health professional in National Women’s Health.

Adverse events

Adverse events in health care are a subset of what health practitioners may experience as critical incidents. They are common, many are considered preventable and lead to harm for women and their families. An adverse event can be described as health care management resulting in harm to a consumer or patient that is not due to the underlying condition or disease of the patient (Health Quality and Safety Commission, 2013b; Regenstein, 2013). An adverse event may or may not be preventable. If preventable it can be considered to be as a result of a failing at the personal, organisational, technological, environmental or social level (Farquhar, Sadler, Masson, Bohm, & Haslam, 2011). Many errors do not cause harm either due to the nature of the error or the effect it has on that particular patient, and are therefore not called an adverse event but rather a near miss. In New Zealand the latest data for hospital admissions associated with a preventable in-hospital event is from 1998, when the percentage was 12.9% (P. Davis et al., 2002). For this study Davis and his colleagues reviewed 6579 clinical

records of patients admitted to 13 general hospitals within New Zealand. Using the same data Davis, Lay-Lee, Briant and Scott (2003) found at least 5% of hospital admissions were associated with an adverse event (harm occurred to the patient), a figure similar to international rates (Baines et al., 2013; Brennan et al., 1991; P. Davis et al., 2003). The World Health Organisation (WHO) (2014) estimates that in developed countries 10% of patients are harmed while receiving hospital care.

In a large study involving 1743 safety incidents in England and Wales, where the harm was severe or resulted in death, the researchers classified 89% of them as avoidable or potentially avoidable (Thomas & MacDonald, 2016). The term *preventable* implies that an action or inaction occurred that if done differently, a serious outcome may have been averted. However the individual health professionals were not included in the audit and were therefore unable to enlighten the reviewers about the multiple factors affecting the decision making at the time. A smaller, but local study undertaken at Auckland District Health Board found that 48% of severe maternal morbidity was potentially preventable. The most common factor was personnel, which included aspects such as knowledge and skills lacking, delayed response by health professionals, lack of recognition of severity and failure to get supervision (Sadler et al., 2013). Again the health professionals who provided the care were not included in the reviews. Nationally a similar study was undertaken looking at severe maternal morbidity (MacDonald, Geller, & Lawton, 2016). Preventability, in these studies, was decided by a multidisciplinary review panel retrospectively, a process which has now been implemented in New Zealand on an ongoing basis.

The figures above differ to numbers of events recorded as part of New Zealand's National Reportable Events policy where adverse events causing serious harm are required to be notified to the National repository. This is because reporting within the local organisations is voluntary and varies according to the reporting culture (Health Quality and Safety Commission, 2013b). In the 2014-2015 period there were 98 events causing serious harm reported from Auckland District Health Board, of which four related specifically to services within National Women's Health (Auckland District Health Board, 2015a). The likelihood of a health professional being involved in an event that is considered adverse is high within health care.

Events due to natural outcomes

During care, patients can experience poor outcomes that are part of the natural course of the disease process or in the case of maternity a known risk to childbirth. The severity may be reduced by good management however the outcome cannot be prevented. A review or investigation is often required to establish the cause of the poor outcome. The types of outcomes vary depending on the area within National Women's Health. One example is postpartum haemorrhage which is defined in New Zealand as blood loss after birth of 500mls or more. In 2015 284 women at National Women's Health had a postpartum haemorrhage of 1500mls or greater, a blood loss that has a significant effect on the woman (Auckland District Health Board, 2016b, p. 109). Another example is perinatal deaths. In the same year there were 83 perinatal deaths (includes stillbirths and neonatal deaths) within National Women's Health (Auckland District Health Board, 2016b, p. 154). Some of these deaths will have been expected or unavoidable and do not fit the criteria of an adverse event however are still known to be traumatic for staff (Kenworthy & Kirkham, 2011). There were no maternal deaths, however 22 women were severely unwell and admitted to the Intensive Care facility (Auckland District Health Board, 2016b, p. 157). When considering adverse events and natural outcomes as part of the subset of critical incidents their impact is significant in terms of numbers within the workplace. Given the incidence of critical incidents it is likely that most health professionals will be involved in such an event sometime in their career (Sirriyeh, Lawton, Gardner, & Armitage, 2010). Critical incidents are stressful irrespective of whether they could or could not have been prevented.

2.2.2 Critical incidents as a stressor

The critical incidents discussed above can be called external stressors. The human reaction to stressors is part of our survival mechanism. It stimulates a reaction that leads to ensuring safety and protection as well as learning for future similar events (Oken, Chamine, & Wakeland, 2015). It is "our natural protection against damage and, ultimately, destruction" (Araoz, 1998, p. 9). There is a physical reaction with the well known 'flight or fight' responses of increased heart rate (Thompson, 2012). Following such an event the mind interprets the situation and meaning is assigned to the stressor (Forbes et al., 2011; A. M. Mitchell, Sakraida, & Kameg, 2003). The situation only becomes stressful if it is considered, "potentially challenging, threatening or otherwise aversive" (J. T. Mitchell & Everly, 2001, p. 20). This psychosocial influence is of

significance for health care where there could be fear that the caregiver has contributed to harm, shame and guilt that the best care has not been provided and empathy for the person and their family experiencing the poor outcome. Interpretation is occurring in relation to the affected person and the effect on themselves and their profession. The emotional reactions to a critical incident or stressor will be explored using studies in health care and the concept of the second victim.

Emotional responses of health professionals – the second victim

Emotional responses are significant after a critical incident, encompassing a full range of feelings from shame to anger and despair. So profound is the impact that the term *second victim* was introduced by Wu (2000) in recognition of the effect critical incidents and errors have on doctors, a term that is also relevant to all health professional groups in health care. The patient or woman and her family are the first victims as they are naturally the most affected. The term encompasses responses such as shame, guilt, regret, grief, questioning of competency and overwhelming empathy as well as physical effects that are both short and long term (A. W. Wu, 2000). Many studies since have explored further the reality of being the second victim. A review of these is provided that highlights the characteristics and emotions of the second victim in the aftermath of a critical incident. In section 3.1 a more in-depth analysis of the literature specifically related to women's health and the unique needs of the professional groups within is discussed.

The range of emotions related to critical incidents is extensive and widespread amongst health professionals. A systematic review by Sirriyeh and colleagues (2010) of the effects of error on health professional psychosocial wellbeing included 24 studies. They found that responses such as, "shame, guilt, fear, panic, shock and humiliation, immediately following an error was consistently raised in all papers" (Key findings, para. 1) and often manifested in their personal lives. The experiences of self-doubt and loss of confidence were also common. Despite the consistent findings in the literature, in practice health professionals assume they are alone in their suffering. As mentioned in Chapter 1 a study of 20 surgeons in Canada showed that within this group particular individuals believed they were more affected than others, a belief that was found to be untrue when all participants were interviewed. Another study involving 7905 American surgeons reported that 501 (6.3%) of participants had suicidal ideation during the

previous 12 months related to an error (Shanafelt et al., 2011). A survey of health professionals in America found that about one in seven staff (175/1160) had anxiety, depression or concerns about being able to perform their job following a patient safety incident and that this was irrespective of the type of health professional.

Closer to home New Zealand studies, although smaller, have also identified the significant emotional impact of critical incidents. A study of 221 New Zealand doctors who had received a complaint about the care they provided were randomly surveyed and found to experience anger, depression, shame, guilt and decrease in work satisfaction (Cunningham, 2004). Qualitative interviews in a study of twelve midwives in New Zealand and four of their partners revealed a sense of shame when the midwives were not able to meet the perceived expectations (Young, Smythe, & McAra Couper, 2015).

The experience of shame is a particularly powerful emotion that is portrayed in the literature and indicates the despair of the health professional when they believe they have failed to provide care as intended. It also limits confidence in accessing needed support. Felt shame can be defined as a, “person’s experience of negative self-evaluations based on anticipated or actual depreciation by others owing to a failure to meet standards of behaviour” (Creed, Hudson, Okhuysen, & Smith-Crowe, 2014, p. 276). A qualitative study by Jarvis (2016), explored shame as an institutional driver, and reviewed 101 printed media articles in the United States of America. This showed that the experience of shame by physicians was extreme following an error. It was a personal emotion based on the potentially negative perception that colleagues, patients and the public may have and resulted in a collective identity. A “culture of perfection, silence, and autonomy” (Jarvis, 2016, p. 184) contributed to the feeling of shame following error. In a personal disclosure Ofri (2010, p. 1551) stated, “of course I felt guilty - that was the easy part. But it was the shame that was paralyzing. It was the shame of realizing that I wasn’t who I thought I was.” A survey of 120 physicians and 145 nurses across the United Kingdom and United States of America found that the health professionals were reluctant to seek help because of their feelings of shame (Harrison et al., 2015).

The feeling of responsibility for poor outcomes and the subsequent shame has contributed to a silence about the emotional impact of critical incidents. An

ethnographic study by Dixon-Woods, Suokas, Pitchforth and Tarrant (2009) explored behaviours and beliefs around risk; “The general tendency not to discuss fateful mistakes in interviews is likely to be associated with the moral qualities of such errors, and in particular their shame-generating properties” (p. 365). When incidents with serious consequences were discussed the focus was on events that had occurred in other parts of the facility and the person who had the lapse was not mentioned, “...so much so that the accounts are usually rendered in the passive voice, thus making the perpetrators invisible and (paradoxically) revealing their shamed status” (Dixon-Woods et al., 2009, p. 366). A study in Great Britain that included interviews with 12 midwives and their experience of caring for women and their families following stillbirth found that they all found the events deeply meaningful, “resulting in them experiencing highly negative emotions and, in some instances, deep unjustified feelings of culpability (Kenworthy & Kirkham, 2011, p. 17). This finding is similar to that of Sheen, Spiby and Slade (2016) who interviewed 35 midwives in the United Kingdom who had experienced a perinatal event.

Many studies report a lack of confidence in health professionals’ ability to continue working following a critical incident (Calvert & Benn, 2015; Farrow, Schulkin, Goldenberg, & Fretts, 2013; Jones & Smythe, 2015; S D Scott et al., 2010; Ullström et al., 2014). In a survey of 281 Swiss anaesthetists 45% were concerned about their ability to continue working even though this was following what was considered minor incidents or near misses (McLennan et al., 2015). In Jones and Smythe’s (2015) small study of five New Zealand midwives’ lived experience of stillbirth identified a theme of ‘blameworthiness,’ as a “common assumption may be made that the midwife did not live up to shared expectations” (p. 20). A significant consequence of error and adverse events is health professionals deciding to leave or consider leaving their roles (Schröder et al., 2016; Ullström et al., 2014). In an American survey of 898 health professionals from four different groups, the researchers found that 15% reported that they had considered leaving the profession (S D Scott et al., 2010). In New Zealand midwifery adverse events and the subsequent lack of support have been linked to burnout and leaving the profession (Young et al., 2015).

The impact of critical incidents can invade all aspects of the health professional’s world with significant effects on daily living. Intrusive thoughts about the critical incident

were found to occur for most (65%) participants in a study of 91 emergency nurses in Switzerland (Kleim, Bingisser, Bingisser, & Westphal, 2015). Inability to sleep frequently occurred due to the event (McLennan et al., 2015). Schröder and colleagues (2016) found in their study that sleep disorders occurred equally within the midwifery and obstetrician groups after a traumatic event. A Polish survey of 100 physicians across specialities identified that 82% had an ongoing fear of making an error (Stangierski et al., 2012).

Alongside the emotions outlined above that result from an incident occurring, there is the added element of embarrassment that is experienced when becoming emotional or showing feelings after a critical incident. In a study of 11 student midwives in the United Kingdom, aptly titled ‘Am I too emotional for this job’, Coldridge and Davies (2017) state there was “a fear that speaking out about distress would render the student vulnerable to being labelled as inadequate or difficult” (p. 4).

The emotions outlined above have been portrayed as negative for health professionals. It is argued by Hutson (2015) however that the perceived negative responses are intended as positive and are “tools carved by eons of human experience to direct us where we need to go” (p. 47). They are motivators for improving and developing a safer health care service. However, Harrison and colleagues (2015) describe health professionals as able to feel empowered to discuss and improve safety following poor outcomes only when they are supported, trusted and valued. A supportive environment is needed for the emotional effects to be translated into modified practice. The evidence is convincing, all health professional groups are affected by critical incidents and the individuals involved considered the second victim. The range of responses is extensive and impacts on the ability to access needed support and improve health care. Insight into the underpinning cause of these emotions and feelings is essential to plan change and improve the current support provided in Women’s Health.

Stress that leads to trauma

Distress is experienced more in some health professionals than others indicating underpinning factors outside the workplace. The reactions discussed so far are common and not necessarily pathological or result in psychological disorders such as anxiety, depression and post traumatic distress disorder (PTSD) (J. Johnson, Panagioti, Bass, Ramsey, & Harrison, 2017).

The American Psychiatric Association (2013) distinguishes between normal stress reactions and the characteristics that indicate abnormal reactions:

When bad things happen, most people get upset. This is not an adjustment disorder. The diagnosis should only be made when the magnitude of the distress (e.g., alterations in mood, anxiety, or conduct) exceeds what would normally be expected (which may vary in different cultures) or when the adverse event precipitates functional impairment (American Psychiatric Association, 2013, Adjustment Disorders section, Differential diagnosis, Normative stress reactions, para. 1).

The systematic review by J Johnson and colleagues (2017) of 38 papers (representing 46 studies) of predispositions to distress after mistakes or failure across a variety of fields found high self-esteem, a positive attributional style and a lower level of socially expected perfectionism were associated with an increased ability to cope. They propose that work in these areas could assist in providing a buffer to distress following mistakes. Interventions that develop resilience could be beneficial in reducing stress following critical incidents. Jonsson and Segesten (2004), using earlier studies identified age, family patterns and previous experiences of violence as possibly contributing to a person being more prone to Post Traumatic Stress Disorder (PTSD).

In summary, a review of the literature and data relating to critical incidents within women's health demonstrates that the likelihood for exposure or experience of a critical incident is high. It is potentially an everyday event or concern in practice for health professionals. This section of the literature has highlighted some key types of critical incidents, however it does not capture all possibilities of what a health professional may perceive as critical. Incidents are processed and meaning attributed, meaning that includes; shame, guilt, responsibility, empathy and incompetence. This may be explained by considering that meaning is socially constructed through relationships (Berger & Luckmann, 1966), within and external to the health organisations. How these connections influence health professionals' interpretation of the critical incidents will therefore be explored through the lens of social constructionism which is unpacked in the next section.

2.3 Social construction of critical incidents

Critical incidents occur within a social, political and cultural context which potentially influences the response of health professionals and the support they will receive from

colleagues and the organisation. Schuetz (1953) has argued that the way we see the world is shaped more by those around us, our families, teachers and colleagues, than by our own experience. Within the social construction of knowledge there are two key concepts: social constructionism and social constructivism. Parker and Carroll (2009) noted that constructivism and constructionism are difficult to separate and have an “ambiguous relationship with each other” (p. 267). They explained that both ideas focus on the construction of meaning, that is, constructivism draws meaning from an individual and largely cognitive stance, while constructionism offers a more social, relational and perhaps more critical stance. Their summary is that, “While such a differentiation is relatively straightforward to express, the fuzziness between the social and individual clouds such a delineation” (p. 267). While both ideas potentially have bearing within my study, I have chosen to more strongly associate with social constructionism because of the opportunity it provides for an examination of the influence of multiple social interactions in relation to creating meaning about critical incidents. I therefore offer an argument for the contribution of a social constructionist perspective towards knowing in relation to critical incidents within the next section.

2.3.1 Social constructionism

In social constructionism it is argued that knowing is more than an individual process, as it is also attained through social connections (von Glasersfeld, 1984). It is founded on a sociological theory of knowledge where knowledge is constructed through interaction with others and is socially situated. Different notions of reality and knowledge apply to specific social contexts. The roots of the concept of sociology of knowledge are in the writings of Marx and proposed that, “a man’s consciousness is determined by his social being” (Berger & Luckmann, 1966, p. 17). Max Scheler, a German philosopher, posed the term *sociology of knowledge* in the 1920s but it remained on the periphery of thinking (Berger & Luckmann, 1966). Karl Mannheim developed the theory more radically in the English speaking sphere and promoted the idea that no thought “is immune to the ideologizing influences of its social context” (Berger & Luckmann, 1966, p. 21). All forms of knowing are socially constructed and are concerned with everyday reality:

The sociology of knowledge must first of all concern itself with what people 'know' as 'reality' in their everyday, non-or pre-theoretical lives. In other words, common-sense 'knowledge' rather than 'ideas' must be the central focus for the sociology of knowledge. It is precisely this 'knowledge' that constitutes the fabric of meanings without which no society could exist (Berger & Luckmann, 1966, p. 27).

Dewey advocated for a pragmatic social constructivism within education. His philosophy was that social activity underpinned all learning and subject matter (Stemhagen, 2016). In gaining knowledge through experience, the experience is not only internal to the individual but also involves the culmination of activities that have gone before. When attaining knowledge or learning, “attentive care must be devoted to the conditions which give each present experience a worthwhile meaning” (Dewey, 1938a, p. 49). The experience of health professionals and the meaning attributed to critical incidents is shaped both by what has gone before in health care organisations and the relationships with and beliefs of women and their families. In the case of critical incidents in health care within New Zealand that includes the expectations of women and their families, error causation beliefs, national and local policies and the Health and Safety at Work Act 2015 which will be examined in the next section.

2.3.2 Societal expectations

For the woman and her baby, any critical incident or adverse event is personal, not a statistic. A health professional has failed to deliver the service the woman expected as their right when they entered the organisation (Austin et al., 2014). The woman and her family want the issue addressed from the individual perspective. Although the humanness of health professionals may be acknowledged, “technological wonders, the apparent precision of laboratory tests, and innovations that present tangible images of illness have in fact created an expectation of perfection” (A. W. Wu, 2000, p. 358).

There are high profile examples from the media in New Zealand that portray an expectation of individual blame and accountability to make the health service safer. In 2009 a medical student died of meningitis. The cause was identified as a systems issue however the staff involved in the care were still publically named. The parents are reported to have said this was a “victory for open justice and freedom of speech” (Johnston, 2013, para 3) with the article titled, “Zac will rest easier' after naming.” The names had previously been suppressed by the Coroner “because of the perceived risk

that the health workers could be subjected to unfair media criticism, a form of punishment” (Johnston, 2013, para 14). In 2014, five years after Zachary’s death, his father is reported to still be “chasing the doctors involved” (Skelton, 2014, p. para 17) . Although accepting it was system issues that contributed to the death, he then wanted to examine each individual part of the system.

Another situation relating to Women’s Health was similarly long and public. In 2009 baby Adam Barlow died during a difficult labour and the midwife was found by the Health and Disability Commissioner to have made errors in the care provided. Following the lifting of name suppression it was acknowledged in the media that the exposure would be hard for the midwife concerned but was reported that, “experiencing the consequences of one’s actions is natural justice in action” (Jachin, 2011, p. para. 2). A long process ensued and it was in 2015 that Adam’s parents felt they had closure when the individual midwife was held publically accountable within the legal system (Akoorie, 2015).

Being open and transparent about critical incidents and possible contributing factors is promoted in health care (HDC Code of Health and Disability Services Consumers' Rights Regulation 1996). Open disclosure involves the health professional informing the patient, woman and her family of any error or adverse event that has occurred, however adequate support for health professionals to do so can be lacking. Charles Vincent (2003), a Clinical Psychologist and Professor of Clinical Safety Research states, “clear guidelines for discussing errors with patients should be backed up by an institutional policy on open disclosure” (p. 1005). Improved patient safety is high on the agenda politically with new strategies in place to reduce harm to patients. Alongside, adherence to the Code of Health and Disability Services Consumers‘ Rights requires that, “Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive” (HDC Code of Health and Disability Services Consumers' Rights Regulation 1996, s6). This includes adverse events and the Health and Disability Commission (HDC) guidance for health professionals on how to be open with consumers (Health Quality and Safety Commission, 2013a). However, this socially constructed, dominant societal view of individual accountability creates an uncomfortable contradiction for health professionals attempting to have these difficult and stressful conversations.

2.3.3 Cultural

Cultural interpretation of poor outcomes has been inadequately studied. A New Zealand study in 1998 found that Māori are more likely to be harmed in hospital (14%) than non-Māori (11%) (P. Davis et al., 2003). Further analysis of the data by Davis and colleagues indicated that Māori received poorer care in the hospital setting (P. Davis et al., 2006). There does not appear to be any published literature on the cultural impact of health professionals' involvement in critical incidents. To address this gap I met with the Māori Midwifery Advisor at ADHB to gain her expert opinion. Transferring of information relating to Māori is often done through story telling (Curtis, 2016). The Māori Midwifery Advisor shared a story of an adverse event where the Māori family wanted an apology first, not to blame, but to have the event acknowledged.

Appreciating the cultural needs and expectations of women and their families is important, with a lack of awareness likely to contribute to the distress experienced by all involved, including the health professional. The socially constructed meaning of critical incidents varies between women, families, health professionals and each individual within these groups. Cultural influences affect that meaning however it is not a well researched area.

2.3.4 Legislative context

Internationally, emotional harm alongside physical harm, was acknowledged in 1974 by psychiatrist J. Freudenberger (Doolittle, 2013). In New Zealand in 2002 an amendment was made to the Health and Safety in Employment Act to include workplace stress, “iv confirming that harm can be caused by work-related stress” (Health and Safety in Employment Amendment Act 2002).

In May 2012 an announcement was made for a \$37M increase in workplace health and safety spending over four years which included producing a new Health and Safety Act. At the time employers were saying the Act was hazy and it was unclear how they were to comply (O'Brien, 2012). A number of incidents in the work place led to the appointment of an independent task force in 2012 on Workplace Health and Safety. The most high profile case was the Pike River tragedy in 2010 where 29 workers died in a coal mine. The Health and Safety at Work Act 2015 (Health and Safety at Work Act 2015) came into effect on the 4th April 2016 (Worksafe New Zealand, 2016). The new Act is a change of focus from monitoring to proactively identifying and managing risk.

Each business needs to, “proactively identify and manage its health and safety risks, and make sure information about health and safety is shared with workers, and workers are engaged in matters that could affect their health and safety” (Worksafe New Zealand, 2016, para 3). The evidence of the negative effects of being exposed to critical incidents is well documented. Auckland District Health Board and other health organisations are required to provide appropriate support as part of the requirements in meeting the obligations of the Act.

Another legal influence is New Zealand’s Accident Compensation Corporation (ACC). This organisation provides financial and treatment cover for individuals who are injured. In 1992 attributing fault was introduced as part of the ACC scheme but this was reversed in 2005 (Wallis, 2013). It became possible again for a patient to receive an ACC claim without having to prove the individual practitioner was at fault. A treatment injury claim could be made independent of cause (Bismark & Paterson, 2006). A review of the changes for the medical professional by Wallis (2013) showed that there appeared to be no increase in openness and learning from error despite the decrease in accountability since the change in 2005. There are other factors such as shame and blame as discussed in previous sections which continue to inhibit doctors from discussing poor outcomes and mistakes.

A support programme that acknowledges the needs of the second victim has the legislative backing of the Health and Safety at Work Act 2015 and ACC provides provision for a no blame approach for accidents. Organisations will need to ensure they enable their employees to balance the legislative requirements of open disclosure against the naming and blaming expectations by the public that are considered a requirement of accountability. The social construction of meaning for health professionals experiencing critical incidents encompasses multiple, competing influences.

2.3.5 Theories of poor outcomes and error

As has been shown poor outcomes do occur and health professionals do make errors. The cause of those events can be interpreted in a variety of ways that influence the responses of those around and contributes to the culture in which health professionals work. This section will examine the historical beliefs about poor outcomes leading on to the current dominant perspectives on error causation.

Historical influences

The current assumptions about the cause of unwanted or poor outcomes in health care reflect historical and religious influences. Causation theories have been in existence since the beginning of humankind and some key influences are briefly outlined below. The Old Testament of the Bible has statements aligning bad outcomes with the sins that have gone before such as, “Do not be deceived: God is not mocked, for whatever a man sows, that will he also reap” (Galatians 6:7 Revised Standard Version). Aristotle [384–322 BC] formally began discussions on causation and proposed a more scientific approach involving questioning about the following:

1. the form of the process (formal cause);
2. the matter transformed (material cause);
3. the interaction between the transforming agent and that which is transformed (efficient cause); and
4. the telos, or purpose, of the process (final cause) (Losee, 2011, p. 3).

Through the inquiry into these inductive processes an understanding of the transition from potential to actual is obtained. However, alongside medieval theorists who agreed with Aristotle there also continued a belief in the omnipotence of a Deity, a God who allowed such causal relationships to exist. For example Duns Scotus, a significant philosopher and theologian in Middle Ages, “developed a useful inductive procedure for gaining knowledge of causal relations while concurrently insisting that such relations exist only by God’s forbearance. The scientist’s motivation to discover causal relations is undercut by this emphasis on divine omnipotence” (Losee, 2011, p. 9). Other societies also attribute outcomes to higher beings such as in the Solomon Islands where the traditional belief is that misfortune is the result of offending the spirits (Vunagi, 1998). Stemming from religious thinking is an ongoing belief that evil results in harm and good is rewarded, one which continues to invade thinking covertly in the 21st Century. The belief enables justification that the distress is somehow attributed to an individual’s actions and deserved, therefore making it less likely to happen to the onlookers (Gross & Kinnison, 2007). This becomes a further barrier to health professionals both seeking help and in offering it to each other.

Individual person approach

Theories of causation reflect the paradigm on which they are based. The individual person approach relates a poor outcome caused by an error directly to the person who committed that error. The linear cause and effect model reflects the Newtonian world view where the inquirer can be “confident about our assessments of causal relatedness” (Losee, 2011, p. 199). Those implicated in adverse events are the health professionals providing direct patient care; allied health professionals, doctors, midwives and nurses. Errors are considered to arise “primarily from aberrant mental processes such as forgetfulness, inattention, poor motivation, carelessness, negligence, and recklessness” (J. Reason, 2000, p. 768). Individuals are considered free to choose the actions they take within the organisation and therefore are held personally accountable for those acts. A strategy for reducing harm to women and their families can therefore be to remove the health professional that carried out the act from practice, the act that is fully perceived to be in their control (J. Reason, 2000).

Dewey (1922/2002) argued against an individualistic approach where blame rests on actions independent of the environment, even when the intent of those actions are evil. Punishment of an individual removes them from sight, “and our part in creating him” (Dewey, 1922/2002, p. 18). Following Dewey’s (1922/2002) proposition that crime cannot be separated from the society where that criminal belongs, holding an individual accountable for any outcome when the intention was only good sounds absurd, however that is what occurs in health care and many other professions. A blame culture has dominated (Calvert & Benn, 2015; Pezaro & Clyne, 2015). Maintaining an individualistic view of causation misses the potential to address the real concerns in practice. As guided by social constructionism, the social context, environmental constraints and organisational culture are just a few of the many factors influencing an individual’s actions at any point in time (Berger & Luckmann, 1966).

Systems approach

In response to the limitations of focusing on the individual the systems approach is an alternative accident or adverse event causation theory. It is based on the work of James Reason and is commonly illustrated as the *Swiss Cheese model* (J. Reason, 1995, 2000). Swiss cheese typically has holes through it yet, when it is sliced and the pieces placed side by side most of the holes will not line up. The cheese is likened to health care

where there are multiple steps in each act of providing care. Safety systems are in place such as checking medication, identification of person receiving treatment and informed consent. If several safety measures are not completed the consequences or unsafe actions can line up or follow each other so an inappropriate treatment reaches the woman, potentially causing harm. An error can occur when there are no blocks or defence barriers along the way to intervene and stop it reaching the patient. Failures can be active, such as administration of a wrong medication, or latent, such as inadequate staffing. Either, or both, within a system can contribute to an adverse event. The model includes two interrelated sequences that cause the outcome:

- (a) an active failure pathway that originates in top-level decisions and proceeds via error-producing and violation-promoting conditions in the various workplaces to unsafe acts committed by those at the immediate human-system interface and
- (b) a latent failure pathway that runs directly from the organizational processes to deficiencies in the system's defences (J. Reason, 1995, p. 1708).

Most adverse events result from a combination of both active and latent failures. From a systems perspective the failure may have occurred immediately prior to the event occurring or many years previously and in another part of the organisation. The focus is on a link to a cause but that cause could be found many steps away from the event. The model shows the health professionals who are at the “sharp end as the inheritors rather than the instigators of an accident sequence” (J. Reason, 1995, p. 1710). The purpose is not to shift the blame but to acknowledge the multiple contributors to an error; as Reason (1995) says there is no place for blame where there is no intent for wrong doing. Blame leads to punishment which is inappropriate when the “individuals concerned did not chose to err in the first place” (J. Reason, 1995, p. 1071). The underlying premise is that “humans are fallible and errors are to be expected, even in the best organisations. Errors are seen as consequences rather than causes, having their origins not so much in the perversity of human nature as in ‘upstream’ systemic factors” (J. Reason, 2000, p. 768).

The systems approach is intended to replace the act of blaming the individual. Although supported as an alternative it is critiqued for still being based on a linear, reductionist Newtonian model of cause and effect (Dekker, Cilliers, & Hofmeyr, 2011; Litaker, Tomolo, Liberatore, Stange, & Aron, 2006). However Reason (2000) does allude to the

contextual factors influencing outcomes and the reality that a different person in the same set of variables may have the same outcome. Exploring causation from a complexity theory perspective builds on this aspect and takes it much deeper as will now be discussed.

Complexity approach to adverse events

Complexity theory provides a way of understanding, explaining and ultimately improving systems. It provides an alternative perspective on addressing adverse events in the health system with failure representing a breakdown in “adaptations directed at coping with complexity” (Woods & Cook, 2013, p. 108). The system is not centrally controlled and it is the local relationships that are the only aspects that hold a complex system together. “Each component is ignorant of the behaviour of the system as a whole, and cannot know the full influences of its actions” (Dekker et al., 2011, p. 943). The open, adaptive nature of the system means that after an accident or adverse event the system is not the same as it was before the accident. Many things will have changed, both because the outcome has occurred and because time has moved on (Dekker et al., 2011). It is impossible to identify exactly what happened in retrospect instead a variety of possibilities are established from multiple voices that may point to more than one cause of an error. This is in contrast to the linear links or relationships between static entities in systems theory (Manson, 2001). From a complexity perspective minor actions can have significant flow on effects that are out of proportion to the acts themselves and in areas some distance from where the outcome becomes visible. In discussing an oil spill in the Gulf of Mexico in 2010 Dekker (2011) stated:

As we wade deeper into the mess of accidents like these, the story quickly grows murkier, branching out into multiple possible versions. The “accidental” seems to become less obvious, and the roles of human agency, decision-making and organizational trade-offs appear to grow in importance (p. 1).

In health care the way in which an organisation views the cause of errors and poor outcomes will influence the responses of individuals within to each other.

Understanding of a model that explains error causation is essential as it underpins the background of the study and informs the findings from the action study. An in-depth overview of complexity theory will therefore be provided in this section and later in the literature review will be related to organisational change and action research.

2.3.6 Complexity theory

Complexity theory evolved from general systems theory in the 1970s that had been developed by Ludwig von Bertalanffy, an Austrian biologist (Dekker, 2011) and other scientists from chemistry and physics who tried to build mathematical models of nature (Burnes, 2004). There are several terms that appear to be used interchangeably within the literature on complexity theory, with all having similar key characteristics. Chaos theory and dissipative structures theories focus on mathematical models, while complex adaptive systems uses similar models but focuses more on the interactions between individuals (Burnes, 2004). Manson provides another description of this division; algorithmic complexity that relates to describing a system's characteristics from a mathematical perspective, deterministic complexity which focuses on the potential of a few interacting variables creating sudden changes or chaos, and aggregate complexity which, "attempts to access the holism and synergy resulting from the interaction of system components" (Manson, 2001, p. 409). This last appears to be more appropriately applied to health care because a strong feature is the relationships between components of the system and less on mathematical equations to describe the system (Manson, 2001). As stated by Greenwood and Levin (2007) the world can be seen as a "complex, interacting array of systems and system processes, bumping into each other in a variety of ways. Social relationships and processes are impacted by the physical world as the physical world is transformed by social activity" (p. 58). The social relationships referred to in this section link to the concept of social constructionism discussed previously. Complexity theory provides a model for understanding the meaning gained through the past and present connections within National Women's Health.

Kurt Lewin, [1890 – 1947], a founder in social psychology, is known for his work on organisational development and action research which is discussed in Chapter 4; however there have also been parallels drawn between his work and complexity. The concept of complexity developed from a concern that interactions were seen as linear and problems could be isolated (Litaker et al., 2006). Rather there exist complex systems that are a "tangled web of interactions and exhibit a distinctive property called 'emergence', roughly described as 'the action of the whole is more than the sum of the actions of the parts' (Holland, 2014, p. 2). A common misconception is that complexity is the same as complicated. The distinguishing factor in complexity theory is that the

system is emergent, it is more than the sum of the individual members (Paley & Eva, 2011).

The very nature of complexity renders it difficult to define in specific terms. However, the following are characteristics that Cilliers (1998) proposes to be present in a complex system:

- Large number of elements that interact in a dynamic manner;
- Any element in the system can be influenced and is influenced by many others; However, the exact amount of interactions does not determine the behaviour of the system;
- Interactions have characteristics such as non-linear, short ranged that can be modified as they proceed, and have both positive and negative feedback loops;
- Constant input of energy that creates an ongoing state of disequilibrium;
- Open system that interacts with their environment using history or past to influence the present system; and
- Elements in the system are ignorant of the behaviour of the whole system and therefore only respond to the information available in close proximity. An individual does not have the capacity to know all the possible effects its action can have.

Manson (2001) emphasises further characteristics of aggregate complexity that add to or reinforce those of Cilliers (1998) above. Relationships remain key. There is also a focus on learning and memory within the system with external relationships that occur regularly encouraging “growth of the same set of components and subsystems” (p. 41). If the influences or rules external to the system remain the same the internal components remain, but it also has the ability to grow and be responsive to changes. Emergence is another key element referring to the systems capability of being more than the sum of its parts and therefore not able to be reduced and studied as individual components.

An analogy can help explain the concepts of emergence and the interconnectedness of the elements in a complex system. In simplistic terms it can be likened to a flock of birds flying in formation. Each bird is flying a set distance from other objects, matching velocity and move towards the perceived centre, the result being a formation without a leader or plan (Paley & Eva, 2011). The rules that parts of the system (or individuals in

the system) abide by, lead to self-organisation, a state that is not designed or intentional. In the social world these rules can be seen as “habits, incentives, and routine procedures, which are either the result of historically established ways of doing things or, alternatively, compliance with explicit codes of practice, policy injunctions, and statutory requirements” (Paley, 2010, p. 273). Those who abide by them are usually unaware of the impact on the wider system of their personal acts. Each rule has an *explanandum* (structure, behaviour pattern or situation that needs to be explained) and an *explanans* (rules which they appear to follow) (Paley & Eva, 2011). Developing an understanding of the rules with their *explanandum* and *explanans* provides a glimpse of understanding into the system. For this study that is an understanding of the cause of critical incidents which then influences the organisational response after an event and then that response has an effect on the organisation or what can be called a feedback loop. The system is what makes up the aftermath of a critical incident; the individuals, colleagues, management, organisation policies, the environment and much more. Everyday issues in the workplace, such as experiencing a critical incident, cannot be put aside as the impact affects the whole system. The health professional, manager, woman, or family member that they ‘bump into’ in the aftermath of a critical incident changes the system in ways that need to be explored. There are “many interacting and interdependent agents, or components, what happens in one corner, or what gets decided in one corner, can ripple through the system beyond the possible predictions or knowledge of the original decision-maker” (Dekker, 2011, pp. 14, 15).

Despite complexity theory appearing to provide an explanation for how systems are in health care there are critics of the theory and what it entails. Paley and Eva (2011) argue that a version of complexity exists that appears to have transferred concepts from previous management theories and called them complexity rather than identifying a theory specific to complexity. This version has been popularised following a series of articles in the British Medical Journal, however the authors deny such harsh critique. The essence of the debate appears to relate to how the complex system is described. A possibly linear approach is being taken to understand complexity theory, creating juxtaposition (Greenhalgh, Plsek, Wilson, Fraser, & Holt, 2010).

The current dominant linear approach to causation of critical incidents is not working in practice. Health professional intentions are not to do harm; a model that looks

predominantly at the individual is detrimental to that individual and contributes little to ongoing safety in health care. Complexity provides an emergent perspective on causation of error and poor outcomes that moves the focus away from individual blame. The system that is the focus of this study is all the interconnections, feedback loops and relationships with the external environment, both in the present and past. The principles of complexity theory will assist in understanding that system and where change is most likely to be effective.

2.3.7 Reporting and reviewing adverse events

The socio-political context and theories of causation are entwined with the reporting and investigation requirements in New Zealand. The systems approach underpins the national policy yet how it is enacted demonstrates other powerful influences as outlined in the previous sections. This piece of the literature review will explore the current activities around reporting and investigation practices in New Zealand alongside international literature.

Identification and reporting of adverse events is an activity that is promoted to improve the quality of care in most health care facilities internationally and nationally (Behal, 2013; Chamberlain, 2008; Court, 2003; Garrouste-Orgeas et al., 2012; Lindsay, Sandall, & Humphrey, 2012). The literature promotes reporting to improve patient safety, although it is well known that under-reporting of most serious events occurs (Anderson, Kodate, Walters, & Dodds, 2013; Bowie, 2010; Taylor-Adams & Vincent, 2004). In 2008 the Minister of Health in New Zealand identified the establishment of a national approach to the management of health care incidents as a patient safety priority. The implemented strategy was adapted from international programmes and resources such as the Veterans Health Administration (VHA) National Centre for Patient Safety in the USA and neighbouring Australia (Communio, 2008). Extensive training of clinicians and managers on how to undertake incident reviews occurred across New Zealand.

However, reporting of adverse events within New Zealand health care is recommended but remains voluntary and not mandated therefore the numbers reported can only be an indication of the actual rate. Within the health care workforce the organisational culture and social relationships influence reporting. Lindsay and colleagues (2012) undertook an ethnographic study of reporting practices which highlighted the “social nature of, and social processes around, incident reporting... Incident reporting was rarely an isolated,

private event, but the result of a process involving group deliberation” (p. 1793). Health care assistants were less likely to report due to the hierarchical nature of the organisation. The reluctance to report events is symptomatic of the unsupportive environment. Health professionals are influenced by the reactions of others in the organisation to previous events and learnt what is safe for them. A review of the literature on reporting provides further understanding of meaning that is constructed within the organisation about error.

Studies of barriers to reporting provide insight into the current climate, culture, and understanding and constructed meaning around adverse events in health care. A systematic review of barriers to reporting, that included 38 studies, identified two main categories of barriers to reporting medication errors or near misses; organisational, and professional or personal (Vrbnjak, Denieffe, O’Gorman, & Pajnkihar, 2016). The organisational theme was subdivided into culture, organisational behaviour and reporting systems and professional or personal which included accountability, character of nurses and fear. Fear is of particular interest with the following sub codes noted:

being blamed, being a troublemaker, losing honour and dignity, losing status, being stigmatized, fear of manager’s reaction on medication error, fear of feeling incompetent in front of manager, fear of co-workers or peers’ reaction, fear of feeling incompetent in front of co-workers, physician...(Vrbnjak et al., 2016, p. 172).

Despite extensive training a more dominant fear underpins reporting. This fear reflects the social construction of critical incidents. The actions of others in practice, the media, women and their families that have gone before have shaped the expectations of health professionals going forward. Meaning is applied to future interactions that have been carried from the past.

Following reporting or notification of events in New Zealand health care a variety of methodologies are utilised to review events, based on the above current dominant approach, such as Root Cause Analysis, London Protocol and Case Reviews (Health Quality and Safety Commission, 2013b). Each methodology involves a review team, of varying size, that generally excludes the clinicians involved in the event to ensure objectivity (Auckland District Health Board, 2013, 2014b; Nicolini, Waring, & Mengis, 2011; Pinto, Faiz, & Vincent, 2012). A retrospective account of the actions preceding the event is reconstructed through interviews, reviewing clinical notes and additional

sources such as phone records. The team aims to identify what happened and why, and to develop recommendations to prevent reoccurrence. For any improvement to be actualised, recommendations must be implemented and staff informed of review outcomes (Latino, 2008; Albert W. Wu, Lipshutz, & Pronovost, 2008). Within the current model of voluntary reporting and event review by external personnel, the health professionals involved in the adverse event or error may not have an opportunity to provide their opinions on how the situation could have been prevented and may not receive the external panel's interpretation on prevention until months after the event (Pinto et al., 2012). The investigation is also subject to outcome bias; "The worse the consequences, the more any preceding acts are seen as blameworthy" (Dekker et al., 2011, p. 940). The nature of practice is such that it is not organised, rather it is "a world of practice that is often disordered, where the practitioner is caught up, trapped, and can only do what is possible at the time" (Smythe, 2003, p. 203). Complexity theory provides a different lens that explains the participant's need to be able to provide the other perspectives or components to the story of what happened as outlined in the previous section. Those involved in an event need to be supported to give their voice. "Investigations that embrace complexity, then, might stop looking for the 'causes' of failure or success. Instead, they gather multiple narratives from different perspectives inside of the complex system, which give partially overlapping and partially contradictory accounts of how emergent outcomes come about" (Dekker et al., 2011, p. 944). Modification of an isolated cause can lead only to the system readapting to produce the same poor outcome. Reviews from a complexity perspective would capture an understanding of the multiple interconnections within the system and find the area where alteration is most likely to cause change.

2.4 Conclusion

Critical incidents are an integral aspect of the health professional's experience in practice. Despite the intention to only provide the best care possible poor outcomes can still occur. Distress in the aftermath of a critical incident, such as shame, guilt, fear, empathy and grief are common responses for all health professional groups. This chapter has demonstrated the socially constructed nature of critical incidents through examining causation theories, societal expectations, cultural impact, legal requirements and practices around reporting of critical incidents. Complexity theory highlights the limitations of the current understanding of how systems work and the underpinning

dominant linear cause and effect world view. The responses of colleagues, the organisational processes and expectations in the community from the past, shape health professionals' experiences for current and future events. To promote health professional wellbeing through improved support requires understanding of how the area of critical incidents in practice is socially derived and constructed. Complexity theory has been introduced as an alternative perspective to help interpret the relationships within the system. Chapter 3 focuses on the literature that highlights support needs and strategies for health professionals following a critical incident.

Chapter 3. Support – Unique to Women’s Health and Change Needed in Practice

Critical incidents are common, significant and stressful for health professionals and, as demonstrated in the literature review in Chapter 2, the responses to those incidents are socially constructed. The aim of this study was to improve the wellbeing of health professionals in the aftermath of critical incidents. This part of the literature review examines in depth the specific needs of health professionals in the area of women’s health, current support programmes and the strategies that may have been considered by health organisations. The characteristics of actions that have shown to be helpful in previous studies are also examined. The experiences of professional groups outside health also contribute to the discussion. Complexity theory again provides an alternative to the dominant blame culture and a perspective to view change. With the significant impact of critical incidents established in Chapter 2, this chapter confirms the need for action, action that is ethical and good to improve the support provided for health professionals.

3.1 Uniqueness of working in women’s health services

Women’s health is a specialised area in health that is significantly different from other areas. National Women’s Health at ADHB includes fertility, gynaecological, newborn and maternity services. All of these, apart from gynaecology, involve an anticipated journey into new life. Although death occurs in all areas of health it is rarely expected in women’s health. The impact can therefore be more extensive and traumatic. A small British study concluded that the midwife's experience of a maternal death was comparable to the effect of a large-scale disaster on emergency personnel (Mander, 2001).

3.1.1 Professional groups in women’s health

The specialised nature of the service includes health professionals with roles that also differ from other areas of care. Midwives are only employed within women’s health areas. Allied health and doctors have particular responsibilities. An exploration of professional groups within women’s health is undertaken to gain insights into the effect of critical incidents from their specific perspectives. As I reviewed the literature I am aware of my bias being a midwife and nurse, and therefore having greater insider

knowledge of those fields but I am an outsider for the other professional groups. Although this is a review of the literature my previous understandings influence how I searched the literature and my subsequent interpretation. The literature specific to women's health is examined to demonstrate the differences for health professionals within a service predominantly focused on facilitating new life. The health professional groups are presented in alphabetical order.

Allied health

Allied health refers to a group of health professionals, other than nurses, doctors and midwives, who have direct contact with patients. In this study social workers were the personnel within this group. In National Women's Health social workers in particular are involved in situations of child protection, another potential cause of a critical incident for health professionals. Research undertaken in Auckland District Health Board highlighted the need for social workers to have supervision as a safety net for practice when working in these difficult situations (Haultain, Fouche, Frost, & Moodley, 2016).

Medical including obstetricians

Nuzum, Meaney and O'Donoghue's (2014) phenomenological study focused specifically on interviewing eight obstetricians and gynaecologists and found that the experience of a stillbirth had a significant impact on this professional group. The point of difference for consultant obstetricians was their position of responsibility for the team which created an "emotional complexity for consultants as they lead the multidisciplinary team" (p. 1026). Despite the known impact, training was not provided in coping with stillbirths. Although a small study the participants indicated they were not aware of any support structure and were unlikely to access it if there was as would feel uncomfortable "revealing the impact of death" (p. 1026). A national survey in Denmark by Schröder and colleagues (2016) compared the self reported effect of traumatic births in 2012 between 293 obstetricians and 944 midwives. The midwives in the study reported higher levels of psychosocial health problems, however this was attributed to gender with predominantly females in the midwifery group. There was no association with age, seniority and time since the traumatic event birth. For the measures on the psychosocial questionnaire that included: "(i) burnout; (ii) sleep disorders; (iii) general stress; (iv) depressive symptoms; (v) somatic stress and (vi)

cognitive stress” (Schröder et al., 2016, p. 46) the female obstetricians scored higher in all areas than their male counterparts after the initial four weeks since the event. This is in contrast to a study on surgeons and their experiences previously discussed that showed they were significantly impacted (Luu et al., 2012). It could be that the impact is similar but the manifestation is different for males and females. An American survey of 335 obstetricians identified no difference between male and females in distress levels but older doctors were more likely to be depressed following stillbirth. This was also the case with those having higher case loads (Farrow et al., 2013). It is unclear whether doctors are less affected by critical incidents than other professional groups or whether males are less affected than females however what is understood is that they are significantly impacted with higher expectations of responsibility for the team following a critical incident.

Midwifery

Midwives make up the largest proportion of health professionals within the maternity aspect of National Women’s Health. The dominant midwifery model of care involves working with women, in the partnership model which is particular to New Zealand. The professional relationship is one of trust, shared understanding and decision making, and responsibility. The autonomy of the women to make her own choices for her birth experience is recognised. The midwife is also working as an autonomous practitioner with guidelines for consultation or referral to other health professionals (Guilliland & Pairman, 2010). A small study of ten midwives found that their close involvement with women and their families may increase the risk of experiencing stressful responses (Rice & Warland, 2013). A literature review by Leinweber and Rowe (2010) further identifies the added trauma for midwives in their relationship with women:

it is argued that the high degree of empathic identification which characterises the midwife woman relationship in midwifery practice places midwives at risk of experiencing secondary traumatic stress when caring for women experiencing traumatic birth. It is suggested that this has harmful consequences for midwives’ own mental health and for their capacity to provide care in their relationships with women, threatening the distinct nature of midwifery care (p. 76).

A similar finding was found in a New Zealand study of midwives that identified the autonomous, partnership model as more likely to lead to midwives being blamed and their ability to practice questioned (Calvert & Benn, 2015).

Elizabeth Davis (2010) adds another dimension to the effect of trauma for midwives, that is different from other areas of health care. Most midwives are women and many have had children or have planned to at some point. A midwife's personal grief around their own birth story, according to Davis, can affect how they practice. "Note that labor is also a heightened state in which imprinting and reprogramming can occur. Thus, if you have unidentified or unprocessed trauma, you are likely to be activated by birth, particularly if it becomes complicated" (E. Davis, 2010, p. 41). E. Davis (2010) states, "to whatever extent our traumas are unaddressed, we are likely to be reactionary, volatile or sometimes the opposite of passive and prevaricating" (p. 40). She proposes that this is a reason why midwives are unsupportive to junior or new midwives and uses the term, "eat their young" (p. 40). Coldridge and Davies (2017) have pointed out that, "Midwives who are exposed to traumatic events when working in unsupportive, hierarchical cultures often 'soldier on' in silence and standards of maternity care are jeopardised" (p. 2).

An Australian study found that student midwives were ill prepared for neonatal deaths, potentially having such an experience prior to encountering the topic in their study programme (McKenna & Rolls, 2011). The following is a statement from the study where a baby was found to be dead, "It was my very first day at placement. I was in the antenatal clinic. It was the first time the midwife asked me to find the foetal heart. I couldn't find it and that was no concern to me because I'd never done it before. It just never occurred to me that we wouldn't find it. (Juliet, first year experience)" (p. 78). In this study the students also did not seek support from the midwifery lecturers or the university support services after the traumatic experience. The authors speak of conflict between midwifery focusing on normal and the reality that outcomes may include death. "The culture in midwifery of soldiering on in silence (Kirkham, 1999 and Pezaro et al., 2015) was reinforced by a fear that speaking out about distress would render the student vulnerable to being labelled as inadequate or difficult" (Coldridge & Davies, 2017, p. 4). Education on how to cope with difficult situations was found to be absent from the curriculum of midwifery schools (McKenna & Rolls, 2011).

Support staff

The National Women's Health team at ADHB includes support staff who work alongside health professionals such as cleaners, health care assistants and clerical staff.

The literature was reviewed for studies exploring the effect of adverse events on this group of health workers. No studies were found specifically relating to women's health. One study investigated the stress of health care assistants in older adult care and found, "nursing assistant burn-out scores were similar to scores reported for other health-care workers" (Goodridge, Johnston, & Thomson, 1996, p. 49). In this study incidents were around conflict with the residents in their care and verbal aggression, very little of which was formally recognised. The lack of research reinforces the hierarchical nature of health care.

In summary there are similar emotional responses and needs following critical incidents irrespective of the professional group. There are also differing specific characteristics relating to their roles in service provision and relationship with the women and their families. Social workers provide care in the most difficult social situations, midwives by nature of their role develop close relationships with women and doctors frequently have the added responsibility of taking the lead when there are complications. The various support strategies and characteristics for these professional groups will now be explored.

3.1.2 Support strategies following error or poor outcomes

The second victim phenomenon is well established and the need to support health professionals recognised yet the literature internationally and locally points to an absence of effective support strategies.. The distress experienced is magnified by the response of those around; colleagues, senior staff and management as well as external influences (Ullström et al., 2014). The literature relating to specific support strategies in the aftermath of critical incidents both in health and in other professions will be examined and an overview of the evidence provided.

There are numerous articles highlighting the absence of formal support programmes in health organisations even when the need has been identified. An online survey of 209 patient safety managers in the United Kingdom's National Health System revealed that support for staff following an adverse event was not always available despite being acknowledged as highly important (Pinto et al., 2012). The study by Pinto and colleagues (2012), in conjunction with existing literature, suggests that "clinicians' ability to cope with the emotional impact of adverse events is very much dependent on available reassurance and opportunities for learning" (p. 1007).

In the extensive study by Scott and colleagues (2010) a tiered rapid response system (RRS) was proposed. The first was the 'first aid' that most health professionals need at service level immediately after the event. Tier two provides skilled guidance and support for those identified as a second victim; approximately 30% of health professionals involved in a critical incident are estimated by the authors to need this level of support. The third and top tier of the pyramid is the accessibility of professional counselling support with an estimated 10% needing this level of support. Unfortunately in the development of the programme the interactions at tier one were not considered to be quantifiable and therefore not included in monitoring of the programme. After implementation a large survey of 4,228 health professionals from three hospitals connected support provided with an improved safety environment, which was more significant than the perceived individual benefits (S D Scott, 2015).

Psychological first aid (PFA) as a response to trauma within organisations has been proposed as a tier one strategy. Currently there is little evidence of its effectiveness and the recommendations are based on consensus (Forbes et al., 2011). A train the trainer programme for managers on providing psychological first aid, introduced and evaluated in an Australian facility, showed that the managers self reported knowledge and skills improved (Lewis, Varker, Phelps, Gavel, & Forbes, 2014). However the researchers acknowledged that further research was required into whether this translated into the provision of improved support for staff. Specific processes have been implemented or proposed as support strategies such as debriefing and supervision; these will be examined for their benefits for health professionals.

Debriefing

Debriefing is one of the most referred to strategies proposed following critical incidents. The term *debriefing* has several meanings. It was originally a military term, describing the process of information transfer after a mission and to assess the wellbeing of soldiers to re-establish into regular work. Another form of debriefing, Critical Incident Stress Debriefing (CISD) was pioneered by Jeffrey Mitchell as a tool to enable people to defuse and debrief following a crisis situation. With the aid of a facilitator the facts and feelings are reviewed to encourage normal recovery (A. M. Mitchell et al., 2003; J. T. Mitchell & Everly, 2001). The CSID model has been developed further into what can be termed psychological debriefing, a technique that occurs soon after an event,

generally as a one off opportunity to discuss any experienced trauma. This model is used by Auckland District Health Board (Auckland District Health Board, 2014a).

There is much debate in the literature about whether psychological debriefing provides psychological benefit. Some studies point to the possibility of debriefing intensifying the negative effects of an event (Devilley & Varker, 2008; Rosen & Frueh, 2010). This finding was in spite of participants feeling pleased to have been debriefed. The latest review from the Cochrane Database of Systematic Reviews, a leading resource of reviews in health care, warns against compulsory single individual debriefing as there is “no evidence that debriefing reduced general psychological morbidity, depression or anxiety, or that it was superior to an educational intervention” (Rose, Bisson, Churchill, & Wessely, 2009, p. 2). A further review of multiple sessions of debriefing to prevent post traumatic stress disorder suggests, “that no psychological intervention can be recommended for routine use following traumatic events and that multiple session interventions, like single session interventions, may have an adverse effect on some individuals” (Roberts, Kitchiner, Kenardy, & Bisson, 2009, p. 2). Pender and Anderton (2016) critique the current research on debriefing as it uses measures that rely on the recording of symptoms that may continue in recovery and are therefore inappropriate as a measure; “horrific events are not forgotten but they may become assimilated” (p. 21). The debate continues.

Another form of debriefing has developed as a method of experiential learning, which simply described is learning through experience (Dufrene & Young, 2014; Eppich, Mullan, Brett-Fleegler, & Cheng, 2016). The literature points to a link between patient safety and group debriefing that involves reflecting on the critical incident. In two large American perinatal units a gap was seen between the identifying of new strategies for improving post-partum haemorrhage management and the implementation of these strategies into practice (Corbett, Hurko, & Vallee, 2012). A structured debriefing process was introduced following each post-partum haemorrhage event, initially at one unit and then at the second. At unit one a 33% decrease in massive transfusions and a 79% decrease in unplanned hysterectomies occurred after the introduction of the programme. In the second unit no change in outcomes had occurred when the study was published, however there had been improvement in processes around management that with further time the authors believed may have led to a decrease in haemorrhage. The

range in compliance to debrief was 50-100%. Staff reported a significant increase in their confidence levels to handle haemorrhages and an increase in the six measures of the Safety Attitudes Questionnaire (teamwork climate, safety climate, job satisfaction, working conditions, perceptions of management, and stress recognition) in both the study centres (Corbett et al., 2012).

Another study also showed an improvement in the Safety Attitudes Questionnaire following the introduction of a structured debriefing programme for adverse maternity events. Staff were surveyed at 16-month intervals after the introduction of the programme. Clinicians reporting that the safety climate was good increased from 68% to 79%, and there was increase from 58% to 72% in those reporting a good overall teamwork climate (Weinschreider & Dadiz, 2010). Improvements were implemented, although whether this changed outcomes for patients was not confirmed. Alongside improvement the gathering together of the group in the form of a debriefing can also be informative and educational. As Deahl (2000) says, it can be used to inform “individuals what symptoms they might anticipate following psychological trauma and when and where to seek help” (p. 937).

The above review of debriefing shows that as a standalone intervention, psychological debriefing may not be beneficial and is potentially psychologically harmful. However, it could be useful as a process of empowerment after an event (Durkin, 2012). Caution in using debriefing as a psychological measure is required. In an educational and improvement sense, debriefing as part of a broader support package following an adverse event appears to show more positive effects.

Clinical supervision

Support is intrinsic to clinical supervision, “where the supervisor hears work distress, checks for burnout, and directs to appropriate help” (Dawson, Phillips, & Leggat, 2013, p. 65). In New Zealand Blishen (2016) points out social work receives regular supervision yet nothing similar is in place for nursing (or midwifery). Calvert and Benn (2015), in their narrative interviews of midwives, identified a perception that supervision was, “paramount to lessening the trauma” (p. 106). A study by Haultain and her colleagues (2016), involving social workers at Auckland District Health Board, emphasised in one of the identified themes the “supervisory discussions practitioners

relied on to help inform and shape their practice” when working in difficult situations such as child protection.

However, the evidence for the effectiveness of supervision is debated (Dilworth, Higgins, Parker, Kelly, & Turner, 2013). A literature review that included midwives, nurses and medical staff concluded that although most professionals within the studies perceived supervision to be positive the associations between supervision and effective support could only be considered tentative (Dawson et al., 2013). Dilworth and her colleagues (2013) found, in their literature review, wide differences in what is considered supervision and the variation in its implementation contributes to the current evidence that supervision has a low impact. The review identified barriers to nurses using supervision, which included ambivalence, competing work pressures and a perception that linked it to not coping. Due to the significant costs involved it is unlikely organisations will be investing in supervision programmes for all health professionals. In New Zealand a mentoring programme has been implemented for first year graduate midwives that includes supervision. An evaluation of 180 recipients of the programme demonstrated an effective nurturing of new midwives (Kensington et al., 2016). There has been no indication this will be extended beyond first year.

As with debriefing the quality of supervision depends on the supervisor and can be difficult to access due to time involved and cost to the organisation or individual. A qualitative study of 15 mental health nurses found that an informal approach to supervision was developing due to the need for immediate answers to issues rather than waiting for the scheduled supervision (Gardner, McCutcheon, & Fedoruk, 2010). Dilworth and colleagues (2013) conclude in their review that, “clinical supervision needs to be locally negotiated so that it may appreciate the complex contextual factors at a local level” (p. 29).

Despite debriefing and supervision being promoted as solutions to the support gap for health professionals the evidence remains weak. Each technique is dependent on the quality of its delivery and accessibility in the busy reality of practice.

3.1.3 Supportive characteristics

The success of any strategy is dependent on the manner in which it is conducted. Research studies have identified the type of responses or characteristics in others that

health professionals find helpful. I categorised these, with fellow authors, in a paper published in 2014 as: understanding the nature of practice, taking care of own emotional wellbeing, providing safe environments, professional reassurance and the need to learn (Austin et al., 2014). The literature will be examined under these headings and the previous work strengthened.

Understanding the nature of practice

Understanding the nature of practice, its unpredictability and emergent nature makes blame redundant in most situations. Even when health professionals provide “safe, competent care, there can still be an adverse event” (Austin et al., 2014, p. 22). In sections 3.5 and 3.6 complexity theory was proposed as an alternative to the dominant systems approach as it captures the reality of practice and unexpected outcomes.

Understanding the cause of poor outcomes through the complexity lens removes the need to attribute blame or individual accountability to improve safety in many situations. A survey of 38 doctors, 42 nurses and 104 midwives about their experience of perinatal loss in the United Kingdom showed that those who attributed failings to organisational system issues had less distress than the health professionals who blamed themselves, a factor that contributes to increased staff satisfaction and retention with the potential to improve health care (Wallbank & Robertson, 2013).

Health professional’s own wellbeing

The effect of health professionals personal trauma affecting their response to critical incidents was discussed in relation to women and their own births in section 3.1.1 (E. Davis, 2010). The effect of events in personal lives can affect the intensity of the reaction to the current event and also long-term the ability to provide support to others. In a hermeneutic study of 19 New Zealand health professionals Smythe (2003, p. 202) identified that there was a need for individuals to check “the state of their own spirit of safe practice, and to make others aware when they feel the possibility of indifference or neglect is likely to affect their ‘being safe.’” The individual’s personal social networks were noted to be a buffer for distress in Wallbank and Robertson’s (2013) study relating to perinatal loss, “Beyond the workplace, perceived inadequacy of social support was also revealed to significantly predict increased distress” (p. 1095).

Safe environments

The health environment needs to be safe at the organisational and personal level for health professionals to openly discuss critical incidents. In a survey of 128 participants, New Zealand doctors were reported to be more comfortable informing a patient of an adverse event than reporting it to the hospital (79% versus 21%), (Soleimani, 2006). The way managers and other personnel “handle errors influences whether the provider feels safe in reporting an error” (Seys et al., 2013, p. 683) and is an indicator of the organisation’s culture. Another indicator is the stigma associated with accessing formal support, “Organizations need to break the stigma that remains regarding access and use of mental health care services (Wu et al., 2008), as part of the evolution to a no shame, no blame culture and a culture of continuous improvement” (Seys et al., 2013, p. 686). The health care organisation needs to provide a safe environment for practitioners to acknowledge error or potential harm and access formal support.

The organisational response can inhibit health professionals’ access to the help they may most need. Ullström and colleagues’ (2014) study involving semi structured interviews of 21 health care professionals found the primary individual requirement was, “the need to talk and receive emotional support” (p. 329) but as the title of the research, *Suffering in Silence* indicates, this was not happening. An American study, of 31 clinicians, highlighted that a third talked to family members because they did “not know who was a safe person to confide in” (S D Scott et al., 2009, p. 328).

In Coldridge and Davies’s (2017) study the authors found that students felt more able to face ongoing difficult events in practice when they had care and understanding from colleagues around them. Another study found that, “Sharing with non-judgmental colleagues was reported to ease the emotional burden” (Ullström et al., 2014, p. 329). Creating a safe environment could be helped by role modelling and professional reassurance by colleagues.

Professional reassurance

Several studies already mentioned identify a silence around the emotional distress experienced after a critical incident. Young and her colleagues (2015) found New Zealand midwives appeared puzzled about how others coped with adverse events. This indicates they were not discussed amongst colleagues limiting opportunities for reassurance. Other studies have confirmed that the sharing of mistakes and emotional

reactions is a supportive strategy and needs to be promoted (Seys et al., 2013; Wallbank & Robertson, 2013). Although acknowledging that the emotions will still be there Ofri (2010) believes there would be value in senior staff talking to their juniors, “to talk publicly to trainees about their own errors, and to specifically address how they dealt with the shame” (p. 1551) and other emotional responses.

An explanation for the silence, however is likely underpinned by the intense emotions of shame and the socio-political context discussed in previous sections. As Jones and Smythe’s (2015) New Zealand study highlighted, the midwives in their research used silence as a form of self-protection, “wishing that people would soon forget about it” (p. 20). It is for this type of fear that Pezaro and her colleagues (2016) undertook a survey of 66 midwives and other experts in 14 countries, including New Zealand, on the feasibility of an online intervention. Their findings indicated that, “while face-to-face interventions may be effective for some midwifery populations, they may not fully support those midwives who feel shame, fear and guilt about their own ill health, mistakes or behaviour” (p. 802). This is a similar finding to Wallin, Mattsson and Olsson’s (2016) study of individuals in the general population where there was a preference for face to face contact by most participants. However, there were also those in the study who considered that in specific situations there were advantages of an online resource when seeking help.

As discussed in this review some common tools used following critical incidents have the potential to cause harm if poorly implemented, are difficult to resource and there is a fear among health professionals that sharing too much information can lead to blame. This raises the possibility of self-help packages as a form of psychological first aid. Health professionals need timely, safe support to restore their emotional wellbeing to continue caring for women and their families. Self help packages are being used widely for a range of health related issues (Barak, Hen, Boniel-Nissim, & Shapira, 2008; National Collaborating Centre for Mental Health, 2011; A. J. Scott, Webb, & Rowse, 2015). Now that such packages can be made available on the internet, such support has become more accessible and cost effective. They can also be used as a supportive tool with the intent of preventing ill health and identifying when treatment may be required (Harwood & L’Abate, 2010). A self-help intervention has been developed and evaluated for anxiety, depression and work-related stress or burnout (van Straten, Cuijpers, &

Smits, 2008). Two hundred and thirteen participants were randomly assigned to either the intervention or a waiting list control group. Statistically significant effects were demonstrated on depression and anxiety for the intervention group. Improvement in recovery from burnout was identified but was not as significant. It is possible that a self-help on-line package could assist health practitioners to gather information on the normal responses to a critical incident, be supported through strategies to restore emotional wellbeing and identify when further intervention is required.

Need to learn

In a study of 35 midwives Sheen and her colleagues (2016) identified the need for midwives to learn, make sense of what happened and improve for the future at a personal and systems level following a traumatic perinatal event. Swedish health professionals in Ullström and colleague's (2014) study wanted to learn from the event and in particular to discuss surrounding conditions that may have contributed to it occurring. This is different from receiving education in preparation for management of difficult situations. Indeed, Farrow and colleagues (2013) found that the obstetricians who had the most training in the area of managing women with previous stillbirth and counselling were more likely to experience a greater self reported psychological impact such as self blame and grief. Knowing more is not protective. Learning that is connected to experience in practice is key to meeting health professional needs. A recent publication calling for improved safety in the NHS (National Health Service) highlights the need to remove a blame culture to allow open learning from mistakes (Glasper, 2016).

May and Plews-Ogan (2012) conducted in-depth interviews of 61 physicians about their experience of significant error. The goal of the study was to identify exemplars or, "individuals who despite experiencing adversity, also experienced growth, even wisdom" (p. 450). In relation to talking in response to error they found three themes: silence or not talking to anyone, unhelpful conversations and helpful conversations. The characteristics of positive conversation included: communicating with the affected person or their family, reassurance from others, learning from the events, and then being able to share that learning with others. Health professionals want to learn and improve from critical incidents. It is integral to their wellbeing, however a safe environment to have the open discussion with others that enable this learning is essential.

3.1.4 Insights from outside health care

Professions outside health such as the fire service, police and railway were reviewed for learnings that could contribute to developing support for health professionals. A randomised control trial involving 75 fire fighters in Australia compared the effect of education in the form of a Mental Agility and Psychological Strength (MAPS) training programme on symptoms such as post traumatic stress disorder (PTSD), anxiety, depression and stress (Skeffington, Rees, Mazzucchelli, & Kane, 2016). The results showed no effect from the programme on stress symptoms, access to support or coping strategies 12 months later. Of note is that 9-10% in both control and treatment group indicated they had not been involved in a traumatic event despite being in active fire fighting duty; their regular work was not recognised as distressing.

A survey of 78 police officers was undertaken in Australia prior to their entering the police force, at graduation and 12 months later. The researchers found that officers who had exposure to traumatic events prior to entering the police force were positively influenced on how they were able to cope with stressful situations. Trauma was seen as a growth experience and “can result in characteristically resilient responses to future adverse and traumatic events” (Burke & Shakespeare-Finch, 2011, p. 59). A recent study compared a group of police officers who had been exposed to work related critical incidents with those who had not with the hypothesis that increased exposure would result in more emotional trauma. However, the researchers found this was not the case and other stressors that possibly influenced their emotional state or that coping skills had developed over time (Thornton & Herndon, 2016).

Train drivers are known to experience horrific events, as do health professionals. It is estimated that approximately 75% of them in the US will be involved in a fatality in their careers (Bardon, Mishara, & Bardon, 2015). Bardon and colleagues’ (2015) systematic review found that the most significant impact was the long-term effects following a death that did not meet a psychiatric diagnosis criteria, “non diagnosed or sub threshold trauma is common and has been documented to have long-term effects” (p. 728). Support by the organisation was shown in studies to be protective however it was noted that the very specific nature of critical incidents in the railway required customised strategies (Bardon et al., 2015). There are characteristics of train drivers’ experiences that would need to be acknowledged and addressed in the support they

receive based on the nature of their work. Likewise support packages in women's health need to be customised to meet the unique nature of new life that is the focus of the service.

Despite the differences there appears a generic human need across all of health care and beyond to receive support that considers the unpredictable nature of the work place, is compassionate to the needs of the individual and provides reassurance and an opportunity to learn and grow from the critical incident. This can be summed up by the acronym; "TRUST (Treatment that is just, Respect, Understanding and compassion, Supportive care, and Transparency and the opportunity to contribute to learning)" which is proposed as the five rights of health professionals (Denham, 2007, p. 107). This section of the literature review has identified the basic human needs in the aftermath of critical incidents. From this evidence base, it is clear that a support package is required that addresses the common need yet has the ability to reflect the uniqueness of practice within National Women's Health at Auckland District Health Board, its focus on new life and the specific characteristics of each professional group's partnership with women and the health care team.

3.2 Upholding good action following critical incidents

Another characteristic of practical knowing, as proposed by Coghlan (2016), is that it upholds what is ethical and aims to create value in the area of practice. This literature review has shown that traumatic events in health care are a common occurrence. The effects are widespread although there are idiosyncrasies specific to health professionals in women's health. The current linear perspective of causation of critical incidents in health organisations and the wider community leads to a culture of individual blame that subsequently affects the responses of colleagues and the organisation. Support following critical incidents is an area of practice that urgently needs improving to promote wellbeing of the health professionals who care for women and their families and in turn improve safety for these women.

There are also gaps in the literature relating to what works in practice and is helpful for health professionals. The motivation for this study was therefore based on the desire to advance this body of knowledge and respond to a practical need, by creating a practical knowing of how the service can move from this current state through a process of

change to the desired state of a more supportive environment (Coghlan & Brannick, 2014). Chapter one introduced the need for change and the literature review confirmed a gap in the knowledge of what works in women's health care practice. The desired state is a support package that facilitates health professional wellbeing. The change process involves the development of that package, and evaluation that explores how it could facilitate wellbeing through being relevant and useful for health professional needs.

However, despite the proposed area of improvement being of value the ability to make change is well known to be difficult. The work of Semmelweis [1818 – 1865] provides an example from 200 years ago of the difficulties in implementing a new idea despite the lifesaving effect of hand washing in maternity care (Gillies, 2005). Gillies (2005) attributes the failure to external factors such as doctors potentially seeing themselves as to blame, the poor communication skills of Semmelweis and his low status in the community. One doctor who did believe Semmelweis's theory then realised that he was the cause of his cousin's death from puerperal sepsis and committed suicide. These factors remain relevant in the 21st Century. This section shows how complexity theory can be used to direct organisational change through action research and develop a practical knowing of how the development of a support package could facilitate health professional wellbeing.

3.2.1 Change in organisations

The literature on change in organisations is abundant. Within health care there have been numerous initiatives to integrate ongoing improvement techniques such as six sigma, lean thinking, benchmarking, and Total Quality Management systems but there is little evidence that these have been robustly evaluated (Itri et al., 2016; Samman & Ouenniche, 2016). My project required a strong reflection and evaluation component to establish the usefulness of the package for health professionals, ensure it was implemented appropriately and that harm was not caused. The literature on debriefing shows there is the potential for harm to be caused despite the aim of improving support as indicated by some of the literature on debriefing and also possible unexpected damage. Building evaluation into the development of new initiatives is essential for establishing effectiveness, and in this study to develop a practical knowing of how a support package could facilitate wellbeing. "A half-hearted or conflicted implementation of support systems has the potential to do more harm than good.

Experience shows that it is easier to muster the enthusiasm inside an organization to set up a program than it is to sustain the energy to run it well” (Dekker, 2013, p. 90).

Reflection and evaluation of action is integral to the methodology of action research as the research group works collaboratively through phases of Constructing and Planning Action, Taking Action and Planning Action (Coghlan & Brannick, 2014).

Complexity theory

Essential to successful change is an understanding of how an organisation functions and how change occurs within it. Complexity theory was introduced in section 2.3.5 as an explanation of causation for poor outcomes. The same principles can help us to understand the aftermath of critical incidents and the ways in which the system can be altered effectively. Change within a complexity perspective acknowledges that multiple causes can have multiple effects. It provides a “perspective of viewing and understanding how a system is held together by patterns of action and reaction, relationships, meaning, hidden rules and the role of time” (Coghlan & Brannick, 2014, p. 113). Orr and Sankaran (2007) effectively applied complexity theory in the New Zealand health arena in an action research study implementing an electronic knowledge system. They uncovered hidden behavioural needs of “critical reflectiveness, professionalism, and mutual empathy” (p. 53).

The external influences on the system have been explored in section 2.3. A system is dependent on the external environment and will adapt to survive, creating patterns of behaviour and rules of which individuals may or may not be aware. “At the center of the inhabited institutions perspective is the call to give greater consideration to the social, symbolic, and interactive nature of the action that underpins the social construction of institutional arrangements” (Creed et al., 2014, p. 277). Action research provides a methodology to gain understanding of a system and collectively make change. The methodology is explained in detail in Chapter 4.

Action research and change

The aim of this study was to make positive change for health professionals in the organisation in the aftermath of critical incidents and to develop a practical knowing of how this could occur. Change and learning in practice is key to action research (Coghlan & Brannick, 2014; Parkin, 2009). As a methodology it has synergies with complexity theory and the capability to allow a flexible, health professional driven

process that both enhances learning and supports staff (Phelps & Graham, 2010). Burns (2015) provides key elements in creating change through action research that are underpinned by a complexity perspective. These are summarised below:

- Inquiry process into the system includes layers, starting at the beginning and added to as the inquiry progresses;
- Inquiry is at multiple points so the whole is more visible;
- Storytelling is used to demonstrate the dynamics of the system;
- Patterns of relationship become the focus of change;
- Points in the system are located from where change can be leveraged;
- Alternative attractors or counter voices to the dominant are located; and
- Energy in the system is identified so change becomes possible.

The cyclic, iterative nature of action research enables the constantly evolving nature of the system in the aftermath of a critical incident to be uncovered, points of change identified and their implementation evaluated.

The principles of collaboration and reflexivity are inherent in the action research and the methodology is supported by many change theories (Muff, 2015). Engaging those affected by a problem to develop their own solution is shown to be more effective than ideas that originate externally to those where change needs to occur. The research methodology promotes teamwork, where health professionals can identify and evaluate strategies in a “bottom-up” approach (Clark, 2009). Pryke and Smyth (2006) discuss a relationship model of project management that combines two forms of relationship; position (status, power) and disposition of individuals. It is through relationships that these aspects are mediated and negotiated. Pryke and Smyth (2006) argue that these relationships can be facilitated to improve the performance of the project. In researching the effect of error Jarvis (2016) critiques researchers who focus on individual effects stating, “a large portion of that lived experience takes place in and through collectives - work groups, organizations, and professions, for example which carry along with them salient identities imbued to members” (pp. 174, 175). Jarvis (2016) goes on to promote a collectiveness in working together that is more likely to gain deeper insights into workings of the organisation. In this project that includes insight into all that the system encompasses in the aftermath of critical incidents.

3.3 Conclusion

The reality for health professionals is that they will experience critical incidents in practice. The social construction of the health care system influences how critical incidents are perceived and an individual blame culture prevails. This chapter has highlighted the unique focus on new life in Women's Health. Within each health professional group there are specific responses relating to their role in care that occur alongside the generic effect experienced by all groups. Strategies to improve support in the arena of women's health are limited in the published literature while the number of studies grow that demonstrate the impact of critical incidents on health professionals. There is a gap identified in what works in women's health to improve wellbeing following a critical incident despite a desperate need being clearly evident. Addressing the issue therefore becomes an ethical responsibility of those who are a position to bring about change. A multifaceted approach is required, with the flexibility to develop practical knowing of what solutions fit the complex environment. Action research provides a methodology that enables the researcher to work with fellow health professionals to develop and evaluate a support resource that meets the specific needs of those working with women in National Women's Health. The methodology involves cycles of action and reflection that leads to knowing what might work in practice. Following stressful events health professionals can take three potential paths; drop out, strive or thrive (S D Scott et al., 2009). Women and their families need health professionals to thrive. Chapter 4 will examine in depth practical knowing, its underpinnings and how it is developed through action research.

PART II – METHODOLOGY AND APPROACH

Chapter 4. Researching Action: Underpinnings and Characteristics

The aim of this study was:

To explore how the development and evaluation of a support package could facilitate health professional wellbeing following a critical incident in National Women's Health.

National Women's Health identified a concern that the current support provided was ad hoc and often inadequate potentially affecting health professional wellbeing. The literature identifies a gap in knowledge about effective strategies to provide appropriate help in the reality of the health care environment. Such an issue required a problem solving approach with practical solutions for health professionals. Action research is a practical way of knowing that can be linked back to the work of Aristotle and which has been formalised in modern academia by Lewin, a German psychologist (Eikeland, 2015; Johansson & Lindhult, 2008; Polkinghorne, 2004). Many different ways of undertaking action research have developed over time to align with the paradigms that underpin them and the researcher's positionality. Pragmatism, as the paradigm that underpins this study is explored in this chapter. The nature of *knowing* or epistemology on which this research rests is *practical*. Coghlan's (2016) philosophy of practical knowing for action research provides a framework to conceptualise the learnings developed through the study and integrate the theoretical underpinnings. Examples of action research are examined for their applicability to health care and the problem to be addressed. This chapter situates the study for me as the first person, guides the second person inquiry and takes the journey from action to 'knowing in action' (third person) to enable learning to be disseminated. The underpinning philosophy and roots of action research are explored as they relate to the chosen methodology of insider action research.

4.1 Ways of knowing

Improving practice is key to action research and was the aim of this study.

Understanding practice and contributing to change creates a practical knowing. To

appreciate how action research contributes to practical knowing there needs to be an exploration of the multiple ways of knowing, which will be addressed in this first section, beginning with the historical work of Aristotle [384–322 BC]. Aristotle, following the death of his tutor Plato, began the move from Plato’s view of abstract objects to empiricism, a world interpreted by the senses. Along with having good social and environmental conditions to succeed well in life, Aristotle believed that people also needed to make wise choices. The ability to make those wise choices could only come through having actual experiences in life. The Greek philosopher therefore studied people who appeared to live a good life, looking for common themes and deriving a list of activities that contributed positively. The findings showed a complex world that could not be simply defined, with actions having unpredictable consequences. The consideration of the activities that lead to optimal living involves reasoning and was labelled by Aristotle as *phronesis* or practical wisdom. Practical wisdom draws on all aspects of being human (Polkinghorne, 2004).

Phronesis is the “excellence by which one deliberates well about what to do in the human realm. It is the process of reasoning used to make the appropriate practice choices that constitute a good life” (Polkinghorne, 2004, p. 111). According to Aristotle *phronesis* cannot exist without ethics or being good and vice versa (Eikeland, 1997/2006). This is contrasted with *praxis* which is that actual action or task of good living (and requires *phronesis* to be actualised). Aristotle proposed that there were other tasks that also required their own specific type of reasoning; *theoria* (theory) that requires *episteme* (formal, logical reasoning) and *techne* (making artefacts) that requires use of *poiesis* (reasoning needed to make artefacts from objects) (Polkinghorne, 2004). The increased interest in Aristotle and *phronesis* is in response to the need for “...non-technical, non-mechanical ways of recognising the sovereignty and independence of our everyday cognitions and judgements, without constantly being referred and subordinated to ‘science’” (Eikeland, 1997/2006, p. 6). What makes *phronesis* relevant for action research is that it is a “different kind of knowledge: one that varies with situations, is receptive to particulars, and has a quality of improvisation” (Polkinghorne, 2004, p. 115).

The matter of how we know was a key focus of the work of John Dewey. In the eyes of the American educator and philosopher knowing is intrinsically connected to

experiences, “all knowing, judgment, belief represent an acquired result of the workings of natural impulses in connection with environment” (Dewey, 1922/2002, p. 187). He proposed a practical knowing that builds on that of Aristotle, with a particular focus on what happens after action occurs. Learning can occur when the results are different from what is intended (Polkinghorne, 2004). Dewey saw practice as grounded in the situational, cultural and historical background, knowledge of which the individual internalises to function on a day to day basis. When this knowledge no longer provides the intended result he states, we have the “richest opportunities for advancing practicing knowledge” (Polkinghorne, 2004, p. 121).

Dewey’s initial experiential focus was on *techne*, following success in that field he applied his perspective to the human realm. His trial and error learning can be viewed as an addition to Aristotle’s *phronesis* (Polkinghorne, 2004). He wanted to make “human action more intelligent so that people would engage more effectively with self, others and the world” (p. 124). By engaging in practical world ideas, those ideas could be tested in action. Heron (1996), a pioneer in participatory research and co-operative inquiry, describes Dewey’s view of knowledge as, “an instrument for action rather than an object of disinterested contemplation” (p. 16).

Heron (1996) proposes a hierarchical pyramid of ways of knowing that starts with experiential knowing, a view congruent with those of Aristotle and Dewey. Experiential (“direct, lived being-in-the-world”) knowing moves to presentational (“or pattern”) knowing which supports propositional (“or conceptual knowing”) and culminates in practical knowing (or “the exercise of the skill”) (p. 33). Each form of knowledge forms a basis for the level above and perfects the knowledge below. Heron (1996) argues that the “systemic whole is an interdependent up-hierarchy, a dynamic pyramidal process in which what is below supports, grounds and empowers what is above” (p. 33). Practical knowing combines the former three ways of knowing “to the full fruition by doing appropriate things skilfully and competently” (Coghlan & Brannick, 2014, p. 44). Through action research the knowledge generated is practical knowing. The steps in the action research cycle take the researcher and participants through the ladder of inference from experiencing (being attentive to the data), to understanding (being intelligent), to judgement (being reasonable) leading to action (being responsible) (Coghlan & Brannick, 2014). Dewey argues that if we move from experiences directly to judgement,

with no reflective interlude we are at risk of making incorrect inferences and taking wrong action. Instead he suggests, “if the meaning suggested is held in suspense, pending examination and inquiry, there is true judgement” (Dewey, 1910, p. 108).

The next section will expand on the characteristics of practical knowing that are developed through the action research cycles and relate the characteristics specifically to this study. The pre understandings and initial experiences surrounding the study are linked to the underpinning theoretical perspective of pragmatism to establish a rigorous framework for the presentation of the developing knowledge and changes in practice throughout the study.

As action research can encompass multiple world views it is essential that these are made explicit for this study and in relation to each level. However there needs to be validity to the chosen approaches that distinguishes action research and the quality of the outputs in the research world. Coghlan (2016) provides a philosophy of practical knowing for action research, based on the work of notable philosophers, which includes four characteristics that will provide a framework for exploring the underlying world views and the their relation to action research. They are:

1. Practical knowing is focused on the everyday concerns of human living.
2. Practical knowing is socially derived and constructed.
3. Practical knowing requires attentiveness to the uniqueness in each situation.
4. Practical action is driven by values and is fundamentally ethical (Coghlan, 2016, p. 92).

Through action research this study aims to develop a practical knowing of how the development and evaluation of a support package could facilitate health professional wellbeing following a critical incident. The characteristics of the practical knowing will be aligned to those outlined above.

4.2 Roots of action research

Action research challenges the dominant positivist view in research. Eikeland (1997/2006), a Norwegian philosopher, claims that Aristotle and many other philosophers before and since were undertaking action research as they worked towards

excellence through individual and community development. Kurt Lewin [1890 – 1947], a founder of social psychology, is recognised as being first in formalising action research as a methodology in the 1940's (Dickens & Watkins, 1999; Eikeland, 2015; Greenwood, 2015). He wanted scientists to close the gap between research and action to bring about greater success in both areas. His work also forms the foundation of organisational development as he promoted working together with others to bring about planned change (Burnes & Cooke, 2013).

Argyris (1993) in his review of Lewin's work identified four themes to his action research approach. He believed that "sound theory was practical" (p. 8) with the areas of study being "critical for society" (p. 9). Each study began by observing real life problems and connecting to and testing theory. Secondly Lewin acknowledged the importance of seeing the big picture in a study and then breaking it down into parts for study. Lewin tried to use mathematical formulas to describe the variables influencing people and the effect on change, with the aim of bringing validation. The concept of interactions between parts having multiple consequences provides similarities to that of complexity theory that will be expanded on further in this chapter (Burnes, 2004). To change behaviour there needs to be relational understanding of the system and the wider organisation, and paradoxically it is through trying to change a system that understanding is gained; "researchers must act on a system to understand its dynamics and potential for change" (Greenwood, 2015, p. 429).

Thirdly, Lewin saw change as important at the individual, group and organisational level, and regarded learning at one level as generalisable to the other. The greatest understanding took place when a phenomenon was systematically changed. The integration of first (my inquiry), second (inquiry with others) and third (distributing the inquiry outside the study area) person perspectives is what Reason and Torbert (2001) argue increases the "validity of the knowledge we use in our moment-to-moment living, that increase the effectiveness of our actions in real-time..." (p. 1). The first, second and third person understanding and learning will be explained in Chapter 4 and explored throughout this study. Lastly Lewin saw researchers as having a social responsibility to improve the quality of life and that social science be placed in the "service of democracy" (Argyris, 1993, p. 10). In summary Lewin believed that if the four values above were adhered to, the participants were not objects but clients. Lewin, as a

researcher, was “there to be of help because the help, if effective, would both improve the clients’ quality of life and produce more valid actionable knowledge” (Argyris, 1993, p. 10). Lewin’s social change theories form the basis of many models, including the one used in this study and align with the characteristics of practical knowing in action research that are introduced later in the chapter.

Action research has developed with as many versions as there are researchers and their world views (Bradbury, 2015b; Greenwood & Levin, 2007). Some approaches to action research can appear divergent and almost unrecognisable like a “distant relative” (Bradbury, 2015a, p. 4). However, Bradbury (2015a) encourages researchers to see this as, “constituting a movement that is committed to alternative models for the creation of transformational knowledge” (p. 4). It is up to the researcher to make their underpinnings transparent for the authenticity of the research. This study uses an action research methodology relevant for the insider researcher to promote collaboration with other health professionals enabling a common issue of practice to be addressed through action and reflection, thus contributing to practical knowing.

4.3 Underpinnings of this action research study

It is important to clarify the meaning of action in relation to action research as it is more than a set of skills independently performed. Heron (1996) describes action as a “transactional manifold of meaning, relating a person intentionally to their world” (Heron, 1996, p. 118). A more simple but similar definition by McNiff (2013) describes the action aspect of action research as, “thinking carefully about the circumstances you are in, how you got here and why the situation is as it is” (p. 25). The research part is the methodology used to find out about action. This section will examine the underpinnings of this study as it seeks to research the action of support following critical incidents.

Action research need not sit within one paradigm but rather draws on multiple world views. The methodology is commonly underpinned by critical theory which developed in the early 20th century in response to a developing dominance of positivist science that focused on solving technical problems (Carr & Kemmis, 1986). A group of theorists, who challenged this view, were known as the ‘Frankfurt School’. They recognised that the more difficult social problems of everyday practical living were being ignored in

preference to those that could be examined as objective facts. Critical theory focuses on social justice, exploring the current conditions to “find how particular perspectives, social arrangements, or practices may have irrational, unsustainable, unjust, alienating or inhumane consequences” (Kemmis, McTaggart, & Nixon, 2014, p. 453). Although there are aspects of critical theory used, I cannot claim that this study engages with participants in a way that transforms social injustice. A more pragmatic approach was required for this insider action research. Power imbalances were present in the study, however these were managed by the researcher rather than exposed and addressed. It was important to keep members of the action group engaged in the project. Analysis of how various health professionals enacted power could have felt threatening and disrespectful. I was also an ‘insider’ who had a place within the power structures during parts of the study. Through the changing positionality I needed to maintain constructive relationships.

4.3.1 Pragmatism

Charles Peirce, an American philosopher, is considered the founder of what is called pragmatism (Peirce, 1905). Peirce proposed that philosophical contemplation should relate to that which affects human behaviour. It is through practice that understanding can take place. “But they do so by arguing that these questions should be addressed by drawing upon the resources offered by our practices, and with reference to the consequences they have for our lives” (Bacon, 2012, p. 8). It was in 1898 that William James introduced the concept above as pragmatism and credited it to Peirce. Although traditionally considered a North American concept James identified pragmatic ideas in the work of Aristotle, Socrates, Hume and Locke (Bacon, 2012).

It is a collective name for the most modern solution of puzzles which have impeded philosophical progress from time immemorial, and it has arisen naturally in the course of philosophical reflection. It answers the big problems which are as familiar to the scientist and the theologian as to the metaphysician and epistemologist, and which are both intelligible and interesting to common sense (Murray, 1912/2013, p. 7).

Pragmatism is critiqued for its focus on problem solving without placing values on either the worthiness of the problem or the resulting change in behaviour. The tangible here-and-now becomes dominant rather than a more imaginative future world.

Pragmatists however believe practice is adequate to help understand and change the world (Bacon, 2012).

Along with Charles Peirce and William James, John Dewey was instrumental in developing pragmatism as a Western philosophical movement (J Campbell, 1995). “In the pragmatic paradigm, a conceptually coherent program is designed to address a significant social or psychological problem within a naturalistic, real-world setting, in a manner that is feasible, effective, and efficient” (Fishman, 1991, p. 356). In working from a pragmatic paradigm the specific work of Dewey is used in this study. The characteristics of pragmatism that are central to this study are:

- Pragmatic ontology: reality or truth is what results in practical, useful and productive outcomes;
- Epistemology: useful knowledge provides pragmatic solutions to problems. “All forms of knowing are for action” (Heron, 1996, p. 167); and
- Methodology: The purpose of research is to agree with others about what action to take (Coleman, 2015).

Research is not undertaken by passively observing data and making conclusions about the truth but rather knowledge is developed through the successful participation with the environment and the adaptation of the person to the environment. The health professional’s concerns, unease or perplexity in the work place following a critical incident is the focus of this study; it relates to the reality of their everyday living and requires a collaborative effort for action to bring about change.

Pragmatism underpins this action research study. Elements of critical theory are at play but the study cannot claim to be truly critical. The use of multiple research approaches to inform a study is called a bricolage and can be described as:

...taking research strategies from a variety of disciplines and traditions as they are needed in the unfolding context of the research situation. Such a position is pragmatic and strategic and demands self-consciousness and an awareness of context from the researcher” (Steinberg & Kincheloe, 2012, p. 1494).

The different approaches that underpin how the study was undertaken provide richness to the practical knowing that will evolve.

4.4 Nature of action research

The key activities inherent in most action research methodologies are their cyclic, participatory and reflective nature relating to improvement (Bradbury, 2015b; Coghlan & Brannick, 2014; Heron, 1996; Herr & Anderson, 2015; McNiff, 2013). Through these activities an insight into the world of practice or our lived in environment can be gained. Coghlan and Brannick (2014) outlines three characteristics that broadly define action research:

- “research in action, rather than research about action;
- a collaborative democratic partnership;
- a sequence of events and an approach to problem solving” (p. 6).

In adherence to the above characteristics it is not possible to know in advance how the research will emerge. As the action group works together in a collaborative manner a shared understanding of the issue and a plan for action is developed. That action is then tested and re-examined. Hence at the beginning of the study I did not yet know the specific details of how the action research would evolve.

Many texts were read on action research methodology and action research studies to establish the possible options of approach. The level to which the above characteristics of collaboration, reflection and cyclic nature are achieved or required varies between the types of action research. Key determinants of the differences relate to the following; underpinning paradigm (e.g. Critical action research (Kemmis, McTaggart, & Nixon, 2015), Feminist action research), first, second or third person perspective (e.g. First person action research), collaboration (e.g. Technical action research (Crane, 2014), Collaborative inquiry (Heron, 1996)) or positionality of the researcher (e.g. Insider or outsider (Coghlan & Brannick, 2014)). Some examples of the variations are outlined below.

4.4.1 Types of action research

First person action research has been used extensively in education for teachers to improve their own practice (McNiff, 2013). The individual inquires into their own practice, examining the actions through reflection and making changes, followed by further reflection. First person analysis is used in the action research. However in this

study it was also important that the voices of other colleagues were gathered and interpreted collaboratively to bring about change in practice. A shared understanding of the issue and how to improve support was required. The principles and skills of first person action research provide guidance for my part in the research but I decided that collaboration with others was a key requirement for my study.

Critical Action research requires a high level of collaboration and awareness of the historical and cultural influences to challenge the dominant powers that can bring about social renewal (Carr & Kemmis, 1986; McNiff, 2013). Based on critical theory McNiff (2013) argues that the focus is to “critique, not to initiate or manage change” (p. 50). However, Kemmis, McTaggart and Nixon (2015) describe critical participatory action research as transformative, bringing to the surface oppression, injustice and suffering in a way that people can “find other ways of thinking and speaking, doing things and relating differently to one another and the world that might have other, less untoward consequences” (p. 462). I was aware of the power relationships in the organisation but due to time constraints and the safety of the participants, challenging these was not appropriate, as discussed in section 4.3. The priority was to develop support resources that were relevant for the current climate.

Technical action research involves the researcher, often external, deciding in isolation the intended outcome of the study and then working with others to achieve that outcome (Crane, 2014). I initially believed this was the type of action research that would be most appropriate. It would ensure that I remained in control of the outcome and that the work stayed on track. However, when I began working with the action group after the original proposal and ethics application was approved, I realised a more collaborative approach that included other health professionals in the decision making was more appropriate. Although the term technical action research had been used in the initial information sheets included in the proposal and AUT Ethics Committee application, the description of the study catered for the change in methodology.

Insider action research is action research undertaken by a member of an organisation or community with others in that organisation or community (Herr & Anderson, 2015). My positionality and understanding of the nature of the organisation in which I work guided the decision with my choice of methodology. Coghlan and Brannick (2014)

provided the best fit with a methodology for undertaking action research in my own organisation. The definition they use is from Shani and Pasmore (1985, p. 439):

Action research may be defined as an emergent inquiry process in which applied behavioural science knowledge is integrated with existing organization knowledge and applied to solve real organizational problems. It is simultaneously concerned with bringing about change in organizations, in developing self-help competencies in organizational members and adding to scientific knowledge. Finally, it is an evolving process that is undertaken in a spirit of collaboration and co-inquiry.

Insider action research is recognised as common for professional or practitioner doctorates where study is combined with their regular job (Coghlan, 2007; Holian & Coghlan, 2013). Coghlan and Brannick's (2014) model of action research has strong links with organisational development (Coghlan & Shani, 2014). It connects with the premise that involving members of the organisation in the learning improves the learning and that "one only understands a system when one tries to change it..." (Coghlan & Brannick, 2014, p. 55).

The specific method identified for this insider action research is the General Empirical Method described by Coghlan and Brannick (2014). The cycles in the action research process involve steps of experiencing, understanding, judging and taking action as shown in Figure 2. These steps are based on the ladder of inference and development of knowledge which is explored further in this chapter. Each cycle includes both action and reflection. In reality however, the cycles are uneven and include additional cycles producing a far more creative series of cycles. As Coghlan and Brannick (2014) advise it is a guide rather than a prescriptive recipe, needing to be responsive to complexity of the organisation in which it is occurring. Reason and Bradbury (2006) state that action research is about choices, so being explicit about these choices is key in action research.

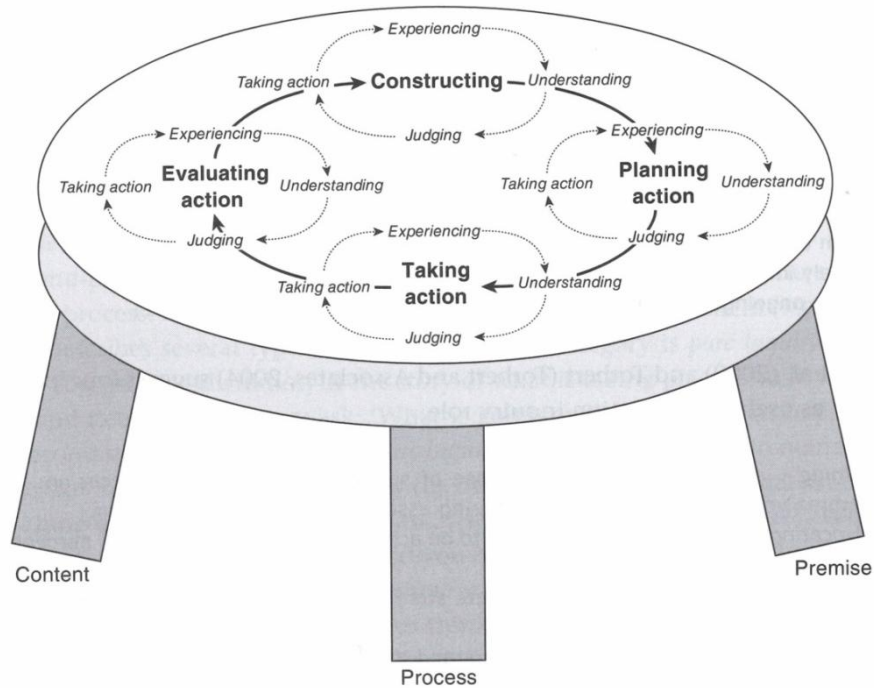


Figure 2. Coghlan and Brannick's model showing the complex dynamics of action research. From “Doing Action Research in Your Own Organisation,” by D. Coghlan and T. Brannick, 2014, p. 38, London, United Kingdom, Sage. Copyright (2017) by Sage Publications, Reprinted with permission.

The cycles are built upon by meta-cycles where reflection occurs on the content, process and premise. As a stool is not a stool unless it has legs, action research is inseparable from an understanding of these aspects and their influence on the project. Action research leads to practical knowing through this in-depth reflective process at the first-person (reflection on about myself, by myself), second-person (relates to working with others) and third-person level (going beyond the research group and disseminating to the wider community). As described by Reason and Marshall (1987, p. 112), “all good research is for me, for us and for them: it speaks to three audiences, and contributes to each of these three areas of knowing.”

4.5 Characteristics of practical knowing

As outlined above action research leads to the development of practical knowing. Coghlan (2016) argues that what constitutes this type of knowing has not been well developed for action researchers. To provide validity of knowing through action research he proposes a philosophy of practical knowing based on four characteristics. These are: 1. The everyday concerns of human living, 2. Practical knowing is socially derived and constructed, 3. Uniqueness in each situation needs to be attended to and 4.

Values driven and ethical (p. 84). These characteristics align closely to the four themes from the work of Lewin (Argyris, 1993), introduced earlier in section 4.2, and other key philosophers who will be included below. These characteristics will be explored below in relation to this study, to demonstrate the underpinnings of pragmatism and to establish a framework for presenting the findings throughout the phases.

4.5.1 The everyday concerns of human living

The everyday, common sense world is practical (John Campbell et al., 1985). Although significant and not an everyday occurrence for the individual the experience of bad outcomes is part of being a health professional. “We are in the familiar world and our interests and concerns are those of human living and the successful performance of daily tasks and discovering immediate solutions that will work” (Coghlan, 2016, p. 94). In acknowledging that critical incidents were a common concern for health professionals and the wider organisation it was important that I explore and make clear how the participants and I decided that improving the experience after a critical incident was important to address through research.

Curiosity about one’s environment, with a desire to seek new sources of exploration and wonder, is key to developing thought according to Dewey. As the curiosity moves beyond the physical and becomes intellectual “it is transformed into interest in *problems*” (Dewey, 1910, p. 33). The support following critical incidents had clearly been identified as a problem at personal, interpersonal and organisational levels. My experience of working as a midwife and being fearful of making a mistake grounded the concern as very real (Austin et al., 2014). A blame culture is predominant in health care when a bad outcome occurs for a woman or her baby, a response which is often unjust (New Zealand Medical Association, 2013; O'Connor, Kotze, & Wright, 2011). It negates the intent of the health professional to come to work to do their best and a desire to do no harm.

Collective concern was confirmed, expanded upon and solutions implemented through the phases. Anecdotal stories, a workshop and survey prior to the research commencing confirmed to senior management that the issue extended to many of those who worked in National Women’s Health. Agreement was that support needed to improve to meet the organisational responsibilities to provide a safe work environment under the Health and Safety at Work Act 2015 (Health and Safety at Work Act 2015). Health

professionals readily accepted the offer to be to be part of the research project, both as participants for the individual interviews and in the group meetings. There was a shared concern for wellbeing. Experiencing a critical incident in health care is an everyday concern for health professionals within National Women's Health at the Auckland District Health Board.

4.5.2 Practical knowing is socially derived and constructed

Knowing is constructed through our interactions with and within the system in which we function. They cannot be separated. As P Reason and Torbett (2001, p. 10) state, "action is always *interaction*." It is therefore not an accurate method to do research on other people; "the human community involves mutual sensemaking and collective action" (P. Reason & Torbert, 2001, p. 10). The sociology of knowledge or constructivism, was developed in the research arena through the work of Guba and Lincoln (1989), who promoted research based in the real setting of practice. Acknowledging that practical knowing is socially derived and constructed also acknowledges the limitation of our knowing as there are always influences beyond the area of study. "Inquiry therefore cannot accomplish a complete account of the human condition, since it is always joined by these friends whose dance extends beyond its range" (Heron, 1996, p. 85).

The important question for the participants and me was how the social reality was framed and its construction critiqued (Coghlan, 2016). The underlying premise with which I approached the study is that health professionals should be supported following critical incidents. What is considered supportive is socially derived and constructed by the participants as well as myself as lead researcher. Throughout the study I needed to acknowledge these assumptions, identify how they influenced the study and ensure the voices of the co-researchers were not only heard but visible in the outputs. Drawing on the work of Habermas, a contemporary critical theorist, the concept of communicative spaces helped explore the various discussion groups that took place during the study. "Habermas's critical theory aims to further the self-understanding of social groups capable of transforming society" (Held, 1990, p. 250). Habermas did not believe in the ability of a single group to have complete power and control, but rather he:

recognizes the existence of various kinds of open 'public spheres' or 'communicative spaces' in which individuals and groups thematize and explore

issues and crises...in terms of public discussions aimed at greater understanding and transformations of social life at the moments and places where specific crises occur (Kemmis, 2008, p. 122).

The underlying assumption in Habermas's view is that the power and influence of each individual participating in the 'communicative space' can be identified and examined. Although not planning to undertake critical action research I entered the study anticipating that I would be able to create a communicative space that facilitated all voices to be captured. In reality that was not possible and I noted that a change in context can alter an individual's influence or power relationship with others that may not have been there in other situations (Steinberg & Kincheloe, 2010). The study is located in a health care organisation where the shifting power relations are a key feature in any participative project. As the study progressed it was evident, particularly in the interdisciplinary communications that some voices were quiet, yet when located in a different space became strong. Creating communicative spaces that maximised the opportunities for voices to be heard and identifying a common understanding required some level of critique of the power relations and then altering the contextual situations for different groups and individuals.

The changing power relationships indicate a need to consider the effect of one meeting (or communicative event) on future meetings and discussions. The words spoken by a person may trigger deep reflection on practice resulting in change for one but have no effect on another (Lichtenstein, 2015). Practical knowing is not possible without the involvement of participants who ground the knowledge in the experiential. My understanding of the meaning of participatory evolved during the study. Initially I believed a collaborative study was being facilitated however as the phases and cycles were worked through I became more aware that was not the case and the study dipped into a what Higgenbottom and Liamputtong (2015) call *consultative* with "community engagement or advisory groups informing the study design by researchers" (p. 9). A collegial or collaborative participatory model enables both researcher and participants to mutually benefit from the study through equal relationships. As the research outputs were for National Women's Health they were benefiting from the study but in different ways to me who sought a doctoral qualification. Practical knowing is socially derived and constructed, a characteristic that was achieved through examining my own pre understandings, communication with others and acknowledging the wider

environment to which we are connected and sharing the findings of the research with them.

4.5.3 Uniqueness in each situation needs to be attended to

Each situation is unique, each system different and evolved from what has occurred before. The literature review in Chapter 2 and 3 provides evidence of the potential for emotional trauma following critical incidents in both health and non-health organisations. However, practical knowing is never complete. National Women's Health, like any other, is unique. The voices of the health professionals needed to be heard to identify the uniqueness of their situation as well as to build new practical knowledge on how to improve support in this setting. As the facilitator of developing something new I needed to do as Dewey (1910) suggests and bring about a "deliberate turning away from the habitual responses to a situation" (p. 156). Unless this is done then ends that are fruitful are not achieved. "When dominated by the past, by custom and routine, it is often opposed to the reasonable, the thoughtful" (Dewey, 1910, p. 156). The process of reflecting on the current knowledge, the influences of the past and the current, lead to action, further reflection and an improved future. The research group needed to gather the voices at this current moment and then confront "what was done before through cycles of action and reflection" (Coghlan, 2016, p. 66). It is through the multiple cycles that validity is achieved and the outcomes well-grounded. Engaging with the data in such a way prunes "what is ungrounded, irrelevant, beside the point" and positively alerts "the inquirers to wider, deeper, more subtle or more obvious, aspects of their experiential commitment" (Heron, 1996, p. 131). Three major phases were undertaken with the action group, which contained multiple cycles and mini-cycles (as detailed in Chapter 5). Knowledge development evolved through the action and reflection that was unique to National Women's Health.

4.5.4 Values driven and ethical

As described by Coghlan (2016, p. 101) "practical action is driven by values and is fundamentally ethical in how values are identified, choices are made and actions are taken." Working together with other health professionals in the action research yet also being the lead researcher with vested interest in seeing the project to completion was an ongoing internal tension. As I had undertaken the initial information gathering I held an in-depth understanding of both the local situation and the international literature that

may have been greater than the participants. I also had the resources (time, skills and motivation) to pull together possible solutions and present these to the group. Transparency is therefore crucial. Coghlan (2016) states that researchers “need to be aware of the choices they face, and make them clear and transparent to themselves and to those with whom they are engaging in inquiry, and to those to whom they present their research in writing or presentations” (p. 101), thus making it a first, second and third person process.

The characteristics of practical knowing, as proposed by Coghlan (2016) and based on the work of other philosophers, have been introduced and related to this study, a study that aims to *explore how the development and evaluation of a support package could facilitate health professional wellbeing following critical incidents*. This provides a framework for the presentation of the research method, findings and the practical knowing that is developed in the thesis.

4.6 Action research in women’s health care and New Zealand setting

The next section focuses on studies already completed within health care. Action research has been used widely to improve health care including women’s health and maternity services (Deery, 2011; Froggatt & Hockley, 2011; Nyman, Berg, Downe, & Bondas, 2016). A review of the methodological issues identified in these studies provides valuable wisdom that informed my study. Key publications are presented below.

A Swedish study, set up to improve the experience of women and their families’ first encounter with midwives in the birthing unit, provides insight to some of the difficulties of doing action research in your own organisation (Nyman et al., 2016). Modifications to their study plan were required to cater for the nature of work and the preferred focus of the staff. For example focus groups were changed to individual interviews as the midwives’ schedules were too difficult to coordinate. To promote reflection the midwives had been asked to write stories of their experiences, however no stories were produced. The intended topic was the first encounter, however the midwives moved the discussion to debate on the use of intervention in labour. Over time and with modifications to the design the action research was effective in change but not without experiences of being “alone at a messy frontline” (Nyman et al., 2016, p. 226) as an

insider researcher. The difficulties were similar in Deery's (2011) study in the United Kingdom, with participants avoiding encroachment on their private world, both in thoughts and time.

New Zealand action research studies had similar issues with the participants of Reed and Hocking's (2013) study concerned that being involved in practice improvement was too much when added to their existing workload, despite believing in the importance of the topic. Learning does not just occur in the final outcome but throughout the process of getting there. Deery (2011) highlights the messiness that should be seen positively as it is from this that understanding develops. These insights from these insider action research studies prepared me for the difficulties that could be countered. With many health professionals already stretched in difficult working conditions, the required physical, emotional and intellectual input can seem too much, no matter how important the topic is. Catering for these limitations is apparent throughout this study.

4.7 Conclusion

My approach to this action research study has been influenced by pragmatism as I faced the realities of undertaking action research in my own organisation. Insider action research enables a rich understanding and easier navigation around an often confusing organisation which needs to be balanced with potentially unchallenged assumptions that can be made. Change can occur through multiple cycles of first, second and third person, gathering of data, understanding and judging of that data, and taking action. Understanding of this change in practice is practical knowing; the characteristics of which relate to "everyday concerns, socially constructed, attending to uniqueness of each situation and values driven and ethical" (Coghlan, 2016, p. 99). These characteristics provide the framework for the subsequent chapters and phases of the action research as a practical knowing of how the:

development and evaluation of a support package could facilitate health professional wellbeing following a critical incident in National Women's Health.

The next chapter will expand in detail how the project was set up, cycles undertaken within each phase and the skills developed to work collaboratively and reflectively in the action research study.

Chapter 5. Creating Change in Practice – Method of Action Research

The establishment of processes that ensure quality of research findings are essential in any project and need to be made explicit. Rigour must be evident to provide validity to the outcomes in both practice and theory in action research. The outcome of the project is both change in practice and “generating robust actionable knowledge” (Coghlan & Shani, 2014, p. 525). Different frameworks have been proposed on which quality of action research can be judged. A simple structure is used by Shani and Pasmore (1985) and includes attention to, “context, quality of relationships, quality of action research process and outcomes” (p. 444). Heron (1996) identifies procedures that, when combined with inquiry skills, strengthen the validity and the resulting outcomes such as; research cycling, balance between reflection and action, challenging uncritical subjectivity, allowing chaos and order, and sustaining authentic collaboration. These validity criteria have similarities to what Coghlan (2016) has proposed to frame how quality action research is identified and these are based on his philosophy of practical knowing, introduced in section 4.5. Therefore as I worked through the research process and also in the writing of this thesis I needed to be transparent in how the following criteria were applied:

- How the practical concerns that drive our Action Research are selected and with whom;
- How we inquire into and critique our construction of situations and our own thinking;
- How we engage in cycles of action and reflection that enable us to address the challenges of each unique situation; and
- How we decide what is good to do and implement it congruently (p. 102).

This chapter will outline the procedures and skills engaged to create a quality action research project using the above four questions, based on Coghlan’s (2016) philosophy of practical knowing, as a framework.

5.1 Selecting the everyday concern in practice

This section relates to clarifying how the study topic was decided and with whom I made that decision. Chapter 1 outlined the experiences that initiated my inquiry into the area of support after a critical incident. In Chapter 2 and 3 the review of the literature clearly identified a gap in knowing what strategies are effective in helping health professionals following critical incidents in women's health. I therefore believed it was an important topic to research for National Women's Health. However, it is imperative in action research that common ground is built on "what is worthwhile and needs to be addressed and how" (Coghlan, 2016, p. 99). Through sharing my impressions with other health professionals, prior to commencing the study, I found that it was a concern to others also. Together we then utilised existing channels in National Women's Health such as morbidity and mortality meetings to profile the need to have effective support. Momentum gathered and the issue became part of the management team agenda and a working group was set up. Alongside, the opportunity to undertake doctoral research enabled me to initiate a detailed study on facilitating support. It is important to note that although a shared concern was present at this point the research and data collection in the first cycle had not commenced. I approached the National Women's Health Management group with an outline of my proposal in October 2013. With the background work that had already occurred members of the leadership team presumed formal approval had been granted. The confusion, although a misunderstanding of the research process, was also an indication of the significant amount of prior work. Following AUT Ethics Committee approval, AUT doctoral requirements and ADHB research approval, the National Women's Health Management group were presented with the finalised proposal in November 2014. Positionality in the study was outlined in Table 1. It was important that I realised this was the starting point of this study. It was from this point that the action research journey to a common understanding needed to commence. Assuming it already existed from the preparatory work could have led to incorrect assumptions and a lack of rigour.

The action group members, who had agreed to work collaboratively together, needed to take the broad ideas raised by myself and a few others and make them their own. As stated by Heron (1996, p. 74), "once the group has convened, its members will need to rework this idea, make it fully their own and bring it to more of a focus." The action group agreed that interviews with individual health professionals on 'what helped

them', along with their own personal experiences would provide the required data to confirm (or not) that facilitating health professional wellbeing after critical incidents was a worthwhile area to study in practice.

5.2 Inquiry and critique of construction of common understanding

This section relates to the second characteristic in practical knowing for action research, proposed by Coghlan (2016) which is the need to be explicit in explaining how the collective inquiry and critique of situations was undertaken. Central to this insider action research was collaboration with other health professionals in National Women's Health. Together a shared understanding of the problem was established and agreed action taken. In this process the participants and I made assumptions about how it is in practice. These assumptions are socially constructed. It was important that the study was designed so that these assumptions could be challenged and critiqued. As Heron (1996, p. 146) states, "the inquirers need to believe in an idea enough to get experientially involved in it, and at the same time they need to be unattached to it, watchful for shortcomings, noticing more than belief in it entails, and having alternative ideas readily available." This section outlines the participants who were involved, how they were recruited and involved in the study with the aim of developing a collaborative and transparent approach. The capturing of the first, second and third level voices is explained, which includes a critique of my own thinking in these steps.

5.2.1 Participants

There were 50 health professionals involved in the study for its duration. Seven participants had more than one role in the study as shown in Table 3. The following inclusion criteria applied:

- Health professionals working in National Women's Health Antenatal and Postnatal wards, Birthing Suite, High Dependency Unit, Women's Health theatres, Maternity Outpatient Clinics, Gynaecology;
- Self employed midwives (LMCs) who have access agreements with ADHB;
- Students who are or have been working in National Women's Health; and
- Consent form completed.

The type of involvement varied according to the phase or action cycle and subsequently a different information sheet and consent form was required (Appendix C). The specific groups are listed below with relevant inclusion criteria and recruitment. Some participants had more than one role in the study such as some health professionals interviewed were also story tellers and members of the action group were also content experts. Additional people contributed to the study outside the research parameter. These included National Women’s Health management who provided support and approval for the study, external contacts who verified their organisation’s details for the eBook, the technical advisor who created the content into an eBook and the various people who provided editing skills for the eBook. The data gathered from the interactions with the participants and method of analysis of this data is explained in Section 5.3.

Table 3. Participant numbers

Participation Type	Number of Participants (50) (7 participants were in more than one group)
Action Group	13
Health professionals	8
- Planning interviews (Phase 1)	
Content experts (Phase 2) (3 also members of Action Group)	5
Health professionals	12
- Evaluation Interviews (Phase 3)	
Midwives – survey (Phase 3)	15
Story tellers (all were involved as participants in other parts of the study)	4

Phase 1, 2 and 3: Action group

Health professionals who were already part of the National Women’s Health working group and therefore already interested in improving support were invited to be part of the action group for this study. The working group set up by National Women’s Health dissolved, leaving the action group as the only group focused on the issue. Additional participants were invited to ensure the group was representative of the health professional types in National Women’s Health (Relates to Phases 1, 2 and 3). An amendment was forwarded to AUT Ethics Committee to allow for the change in

recruitment for the action group (Appendix C). The action group was set up at the beginning and remained for the entirety of the study, however not all members were able to attend all meetings. A core group were present at all meetings with others attending as they were able, ranging between one and four meetings attended. However, participant engagement also occurred via email and discussions outside the main formal meetings. Table 4 below lists the action group participants. All members of the group had been working in health for 20 or more years. Only one of the 13 action group participants was male.

Table 4. Members of action group

Health professional group	Number of Participants (13)
Lead Researcher - me	1
Administration representative	1
Allied Health Leader	1
Clinical Directors	4
Human Resource Manager	1
Midwifery Leaders	2
Nursing Leader	1
Occupational Health representative	1
Theatre Manager	1

Phase 1: Constructing / planning - Individual interviews

The 463 National Women’s Health employees of ADHB were invited to participate in individual interviews via email, word of mouth, and posters placed in staff areas.

Participants were informed in the information sheet that they would be asked to tell the researcher about a time when they were involved in a critical incident, and what helped them through this experience? Although it was not stipulated that they needed to have experienced a critical incident it was implied by these questions. Eight health professionals agreed to participate and their professional groups are listed in Table 5. The range of health experience ranged from two years to more than 20 years.

Table 5. Summary of participants interviewed in Phase 1

Health Professional type	Number of participants (8)
Midwife (employed ADHB)	4
Midwife (self-employed LMC)	1
Obstetrician	1
Registrar	1
Social Work	1

Phase 2 and 3: Taking action and evaluation action– content experts

Three health professionals who worked with me in the development of the content of the eBook had also been part of the action group. A further two were invited for their expertise in the area of critical incidents. The content experts are listed in Table 6.

Table 6. Summary of participants providing content expertise in Phase 2 and 3

Health Professional type	Number of participants (5)
Clinical Directors	2
Maori Midwifery Advisor	1
Occupational Health representative	1
Psychologist	1

Phase 2 and 3: Taking action and evaluation – story tellers

An invitation to all previous participants was made to provide stories. Those stories that related to the study area of critical incidents were selected. Participants who I knew had relevant stories for the eBook were also approached to share. These participants whose stories were recorded for inclusion in the eBook completed a consent form that indicated there would be no anonymity as their voices would be recognisable. A formal interview was also undertaken to capture the view of Māori midwives following a critical incident. Stories and advice from the Māori Midwifery Advisor were recorded and captured in the eBook. In total four stories were recorded from the following health professionals: midwife and lead researcher, self employed LMC midwife, registrar and Māori midwifery advisor. All participants had been working in health care for 15 years or more.

Phase 3: Evaluating Action – Individual interviews

An invitation was made to all National Women’s Health professionals in the same manner as the initial interviews but with the requirement that they have been involved in a critical incident in the previous two years. A summary of the participants interviewed in the Evaluating Action phase are in Table 7 below.

Table 7. Summary of participants interviewed in Phase 3, Evaluating Action

Health Professional type	Number of participants (12)
Anaesthetist	1
Midwife (employed ADHB)	3
Midwife (self-employed LMC)	2
Nurse / Manager	2
Obstetrician	2
Quality representative	1
Social Work representative	1

The 12 participants were female. All but one had been practising in their professional capacity for 20 years or more, with one working in health care for 40 years. The remaining person had been qualified for four years. Nine were employed only by the District Health Board, two were self-employed only and one provided care as both employed and self employed. Two had had recent experience abroad, while all others had spent the majority of their time within National Women’s Health.

Phase 3: Evaluation – Group survey

A questionnaire was provided to the attendees following a presentation I gave at the New Zealand College of Midwives Auckland regional meeting. All who attended were invited to complete the questionnaire.

5.2.2 Setting up and maintaining the action group

As described above the action group consisted of the working group established by National Women’s Health to review support (which in April 2014 dissolved) and additional members recruited to ensure representation of all professional groups. Throughout the study this group is referred to as the *action group*. As the study evolved, the reality of working with health professionals in a busy, complex organisation led to a pragmatic approach. I ensured the meetings were in rooms that were easily accessible

from their work areas so they were convenient to attend. Food was provided as it is known to encourage connection in a group (Aragón & Castillo-Burguete, 2015), along with reducing the need to leave meetings early to eat.

5.2.3 Voices of action research participants

In an integrative, insider action research approach, as outlined by Coghlan and Brannick (2014) there are three voices to capture; first, second and third. This section will explain what is meant by these voices, how they were captured in this study and the skills required ensuring validity in the research process.

First person action

The first person aspect of the study involves the inquiry I have undertaken on my own during the cycles in each phase and in the write up. This inquiry includes work around the study topic (content), my assumptions (premise) and the action research process itself (process). The participants may have also undertaken such inquiry however the project was not set up to capture their first person inquiry. The interviews that I undertook with participants provided their individual reflections and thoughts on critical incidents however I had directed them through questioning and there was no commitment for them to join the action group or continue in the study following the interviews.

To capture my personal inquiry I kept a diary and journal. After each meeting, interview, email or other 'moment' such as reading a relevant text I would make an entry. Sometimes only the facts were required, other times I recorded how I felt and considered possible reasons for feeling that way. I wrote questions for myself about other possible meanings. Such a process is supported in the action research literature (Zuber-Skerrit & Fletcher, 2007). "At its core, first person practice means that our own beliefs, values, assumptions, ways of thinking and behaving are afforded explicit attention as we experience ourselves in the inquiry and in action" (Coghlan, 2013, p. 334). As part of my reflection in the action cycles I returned to my journal entries from previous cycles to help inform the next steps.

Coghlan (2013) speaks of needing training and practice to gain skills in self-development and critical thinking. I questioned whether I had these skills in enough depth. The initial papers in the doctoral programme included such skills and I was

encouraged to regularly write my thoughts and reflect on them, to gain an understanding of what made me who I am and how I am as a leader. However, this was only the tip of the high level of skills that are required for action research and much more learning occurred during the study. This learning of the skills is captured in my reflections throughout the thesis.

Second person

Second person refers to researching with others to facilitate wellbeing following a critical incident. As action research is collaborative this is an essential area to undertake skilful inquiry. Relational skills are particularly important at the second person level. To understand my engagement with others I needed to understand myself. My philosophical underpinnings were examined in the previous chapter but I also have personal dispositions that affect the way I interact. Some I was aware of prior to the study and others became apparent. For example, when I listened to my recordings of the interviews with health professionals I was surprised to hear that I started talking before people finished speaking. Prior I would have been adamant I did not do that, perceiving myself to be an exemplary listener. As the study progressed I consciously aimed to avoid this.

In the group sessions I needed to be able to facilitate a wide range of health professionals from a variety of perspectives. To capture the voices of all groups I needed to be responsive to the dynamics. One particular group asked to meet separately as they did not feel heard. This was both positive as they wanted to have their say but also disappointing that I had not facilitated the meeting in the way I intended. Heron (1996) recognised similar patterns where “high contributors may habitually and unawarely push aside low contributors” (p. 154). Identifying and breaking these patterns is essential. This situation also forced me to question the action research method I was using and confirm that such diversions still fitted the methodology.

The meetings were recorded and transcribed. When listening to the meetings the second time I could hear aspects I missed in the actual meeting. I was able to focus on hearing what was said without the burden of trying to facilitate the meeting. I was also aware I was now only listening to the words and not other forms of communication such as body language. This was more beneficial than reading the transcripts alone. It takes much practice to develop skills in facilitation, that Olesen and Nordentoft (2013)

recommend comes with many hours of watching yourself on video. I realise now that I am very much a beginner and more practice prior to starting the study would have been advisable. However, as stated before I believed I was already reasonable in this skill.

Schein (2013) speaks of various ways of engaging in an inquiry. The first involves listening to a story calmly and neutrally – what is referred to as pure or humble inquiry. “Humble inquiry does not influence either the content of what the other person has to say, nor the form in which it is said” (Schein, 2013, p. 33). This type of inquiry was my intent during the initial Constructing and Planning Phase of the project when health professionals were interviewed. However, in hindsight I was not as pure as I had hoped. I used questions such as ‘Tell me about what helped you after a critical incident.’ I could never be completely neutral as initiating the study already inferred that I was concerned about the lack of support provided. I also felt that while the interviewees were telling their stories they often wanted affirmation that I understood what they were saying. There was an element of needing the interview to be therapeutic, something one of the participants explicitly stated (Planning interview 3).

Confrontive inquiry was also used as I presented the literature and my point of view from being immersed in the study topic and data (Coghlan & Brannick, 2014). Although aiming to be collaborative I felt an expectation that the group participants thought I should come with answers. The meetings reflected the culture of the organisation, a culture that will be made explicit during the action cycles. Through my many meetings with these same people; it was the same dynamics but a different topic. I only managed moments of ‘going beyond the cultural status quo’ (Coghlan & Brannick, 2014). It was not only my own approach, it was also those within the action research group. I made initial assumptions that participants interacted according to different perspectives, based on professional groups, however I realised this could be challenged. Together the group worked through the assumptions to a shared understanding on which to take action.

Third person – knowledge generation

Third person inquiry, according to Coghlan and Brannick (2014), is seen through the dissemination of the reports, publications and in my study also as a thesis forming part of an academic qualification. This contrasts to the view of Reason and McArdle (2004) who articulate the need for inquiry between the wider community groups to generate

third person knowledge. The change in practice with the theoretical underpinnings is documented in a way that can be considered by other organisations and support package accessed by other organisations; however, its usability at this level can only be presumed without the evidence of wider networking. The actionable knowledge becomes open to judgement, is it valid and trustworthy? The unique challenge of action research, as proposed by Coghlan and Brannick (2014) is to integrate all three levels at both the action and inquiry level.

5.3 Phases and cycles of the action research process –unique to National Women’s Health

Action research consists of cycles of reflection and action. For this study the model by Coghlan and Brannick (2014) is used and is described as the general empirical model. There are four phases in their model but for this study the first two phases have been combined as numerous overlaps existed between these phases. Ferkins, Shilbury and McDonald (2009) also found this in their action research study of change within an organisation (in a board governance context). This approach resulted in the following three phases; Constructing and Planning Action, Taking Action, and Evaluating Action. The phases consist of multiple cycles with each cycle consisting of four steps that are labelled as experience, understanding, judging and taking action within the model. The steps are similar to what Argyris (1993) proposed as the ladder of inference which begins with observing data as the first rung, leading to inferences about meaning, developing beliefs and then to taking action. Through repeating this process action that is unique to National Women’s Health is revealed. It is “how we engage in cycles of action and reflection that enable us to address the challenges of each unique situation” (Coghlan, 2016, p. 102). An overview of the phases are outlined in the next section, followed by a detailed explanation of the steps that make up the cycles within each of these phases. Figure 6 and Table 8 presented at the end of this section demonstrate how each step contributes to the whole process.

5.3.1 Phase 1: Constructing and Planning Action

Coghlan and Brannick’s (2014) model has Constructing and Planning Action as two separate phases however, as noted, they were combined in this study as the activities overlapped. Phase 1 consisted of one main cycle and a smaller sub-cycle. The aim of this phase was to gather a common understanding of the problem area. The concern for

health professional wellbeing after a critical incident had been initiated from my personal experiences; a shared, local knowledge of the issues was required. The sub-cycle was in response to one professional group needing more opportunity to contribute to the clarification of the local situation from their perspective. Figure 3 shows the cycles and steps undertaken in the Constructing and Planning Action phase.

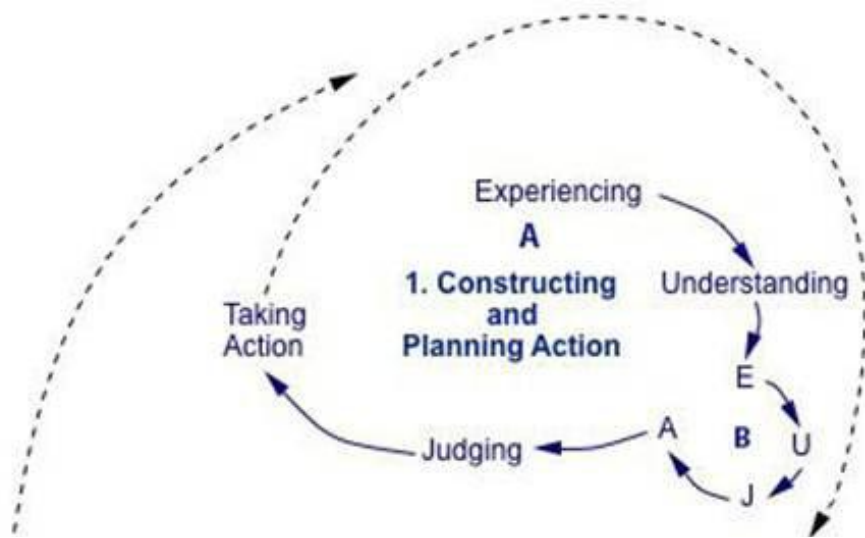


Figure 3. Cycles undertaken in Phase 1

5.3.2 Phase 2: Taking Action

The aim of this phase was to take the action that was decided in Phase 1; to develop the support package. Phase 2 consisted of seven cycles, two main cycles and five mini cycles for specific aspects of the resource, as shown in Figure 4 below.

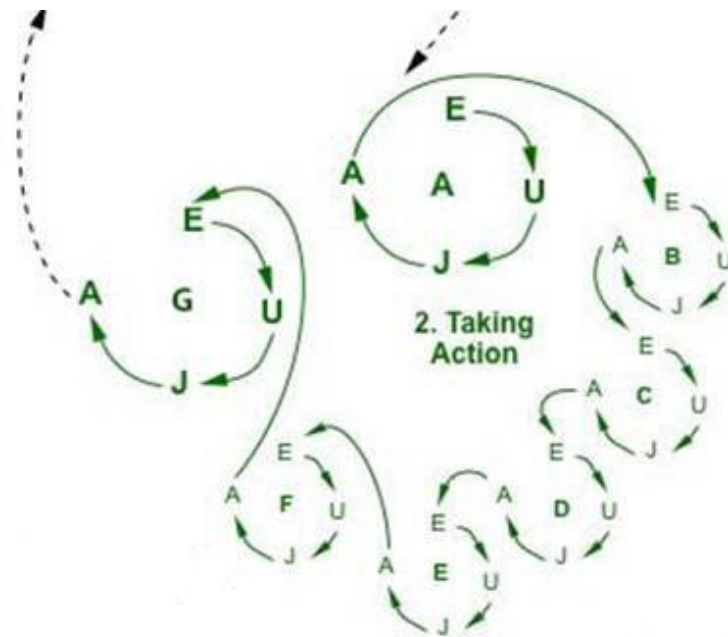


Figure 4. Cycles undertaken in Phase 2

5.3.3 Phase 3: Evaluating Action

The Evaluating Action phase included a main cycle and two embedded cycles, as shown in Figure 5 below. The aim was to apply the action taken in Phase 2 to the world of practice and have health professionals use the developed resource, as a way of refining the action and demonstrating how the development and evaluation of a support package could facilitate health professional wellbeing.

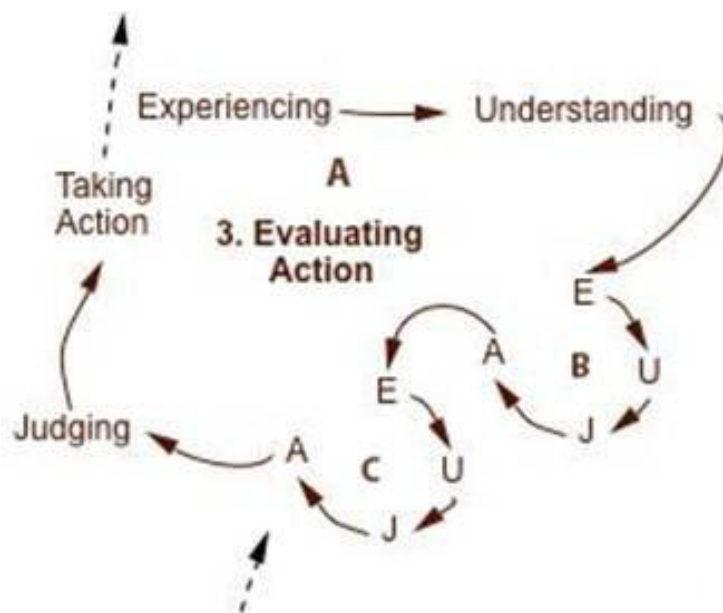


Figure 5. Cycles undertaken in Phase 3

Each action cycle in the phases outlined above consisted of four steps; experiencing, understanding, judging and taking action. These steps are explained in the next section.

5.3.4 Experience

Experience is the first step in an action cycle and is also the first step in the process of knowing (Argyris, 1993; Coghlan & Brannick, 2014; Heron, 1996). It relates to both the inner consciousness and outer data gained from experiencing such as seeing, touching, feeling and imagining (Coghlan & Brannick, 2014). We learn by acknowledging and embracing these experiences and capturing them as data. During the study the experience of support after a critical incident and what was helpful was collected as data at multiple levels and in multiple ways. This data was then examined and reflected on to take it to the next level of understanding. Reflection was occurring at a first and second

person level that was creating a different form of data; “...you as the researcher are an agent in the generation of data” (Coghlan & Brannick, 2014, p. 39). The specific types of data collection and methods for analysis will be outlined.

Qualitative data during the action research was obtained from the stories and discussion that occurred in the individual interviews or meetings and the action research group (see Table 8). The data was analysed and used to inform each phase progressively. The themes developed in Phase 1 underpinned the action in Phase 2, were further built upon and then guided the evaluation of action in Phase 3. The themes were grouped under the four characteristics of practical knowing through each of the phases to guide the development of a practical knowing of how the development and evaluation of a support package could facilitate health professional wellbeing.

At the beginning of Phase 1 eight individual semi-structured interviews, lasting 60 – 90 minutes were undertaken. Participants were asked to tell me about a time when they were involved in a critical incident and what helped them through this experience. The interviews were digitally recorded and transcribed. To develop the themes from the interview data Braun and Clarke’s (2006) method of thematic analysis was used to make sense of the qualitative data. The following steps were used, both sequentially and by revisiting each to develop the themes:

1. Familiarising yourself with the data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Producing the report (Braun & Clarke, 2006, p. 87).

The underlying philosophical perspectives for the research guided the analysis with the identification of layers and connections within the complex system being paramount to understand where change could occur. As stated by Braun and Clarke (2006, p. 82) “...the ‘keyness’ of a theme is not necessarily dependent on quantifiable factors but rather if it captures something important in relation to the overall research question.” The transcripts were read and reread to identify the themes. The reports developed in the last steps were taken to the action research group to inform the next stage of the

project. The action group reviewed the generated themes and the supporting quotes from the interviews. They were using their own experiences as health professionals and for many their managerial role to make sense of the data and revise the themes leading to understanding.

In Phase 2 the individual participants worked directly with the draft of the eBook tool as we met. These interactions were not recorded however notes were written in my journal about the details of the meeting, impressions and the outcome.

In Phase 3 the method of interviewing was the *thinking aloud* technique. This technique required the participant to use the eBook and talk aloud about what they were thinking. It is a form of usability testing (Ericsson & Simon, 1993). Ericsson and Simon classify the verbalisation of thoughts in three levels. The first requires no consideration of the subject matter and immediate vocalisation occurs. Level two involves some processing of the material but is not new to the participant. The final level and that which was used in this study requires verbalising thoughts or thought processes along with an explanation of the thoughts and ideas. The participant needs to link the information to previous thinking, knowledge and experience about the topic. The transcribed data from the evaluation interviews was again analysed using Braun and Clarke's (2006) method of thematic analysis as outlined above.

The action group meetings were also recorded, transcribed and analysed. These data are presented in Chapters 6, 7 and 8 to demonstrate decision making processes, collaboration and learning through the action research.

5.3.5 Understanding

Understanding is the next step in the action cycle. It involves inquiring into the data and being intelligent about what it means. The current problem or situation was an unsupportive response following critical incidents; the focus of understanding therefore was on what are helpful actions. Questions asked about the experience were: how, what, where and why is it this way? (Coghlan & Brannick, 2014). In the study there were multiple times that data required understanding in a variety of situations. I was aware of the time constraints for participants and that it was unlikely that they would read and reflect on their own experiences or information emailed to them. In meetings the experiences captured were summarised as explained above and presented via

PowerPoint. I then facilitated discussion on their impressions of the data, questions were asked for clarification and further situations shared that validated or challenged the thoughts of others. Throughout the writing up of the findings I have explained the processes undertaken in each cycle and included my reflections to provide transparency and validity to my influence on the understanding that resulted.

5.3.6 Judging

Judging involves being reasonable with what you understand the data to mean. Understanding and insights may not be correct (Argyris, 1993; Coghlan & Brannick, 2014). As suggested by Coghlan and Brannick (2014) questions were asked of the action group members such as “does the insight fit the evidence?” (p. 24). In some situations there was reference to the published literature and other times it was necessary to gather more data or experiences to be able to make valid judgements. The judgements were constantly tested by me as the facilitator and the other participants through challenging assumptions made by each other. Coghlan and Brannick (2014) and Heron (1996) talk about the role of emotions which are important as thoughts in the process of knowing (Coghlan & Brannick, 2014). Critical incidents cause an emotional response as evidenced in the literature review and these were therefore present in the research process. All participants had experiences of critical incidents and their emotional response would have influenced the judgements they made. There were times in the group discussions that an individual spoke strongly of what they believed to be true that was not supported by the data collected. In those situations it was challenged by other group participants or I was required to highlight the experience collected that counteracted that belief. Again throughout the findings I have described when these challenges occurred and the reflective process that followed. The evaluation of what may or may not be effective action was then made and enacted in the next step.

5.3.7 Taking action

Taking action is the process of being responsible through, “deliberating, deciding and acting” between different options (Coghlan & Brannick, 2014, p. 29). Underpinning the decision making are values; what options seemed best from my perspective and the participants, something for which there was no absolute. Therefore taking action was inseparable from health professionals and their world of practice. A shared understanding was achieved of what were the best actions to take. “Insight makes the

difference between the tantalizing problem and the evident solution” (Coghlan & Brannick, 2014, p. 24). There were three phases with resulting action but within these were many cycles with further choice points. Figure 6 shows the combination of the three phases in the study and cycles within each phase. Table 8 outlines the cycles, steps, participants and activities undertaken at each point. There is overlap between the activities and participants within the steps. For example each mention of the action group does not indicate a separate meeting as some meetings incorporated more than one step and at other times more than one meeting was required for a single step. The choice points are clearly described in the findings and discussion chapters, including the preceding deliberation and reflections.

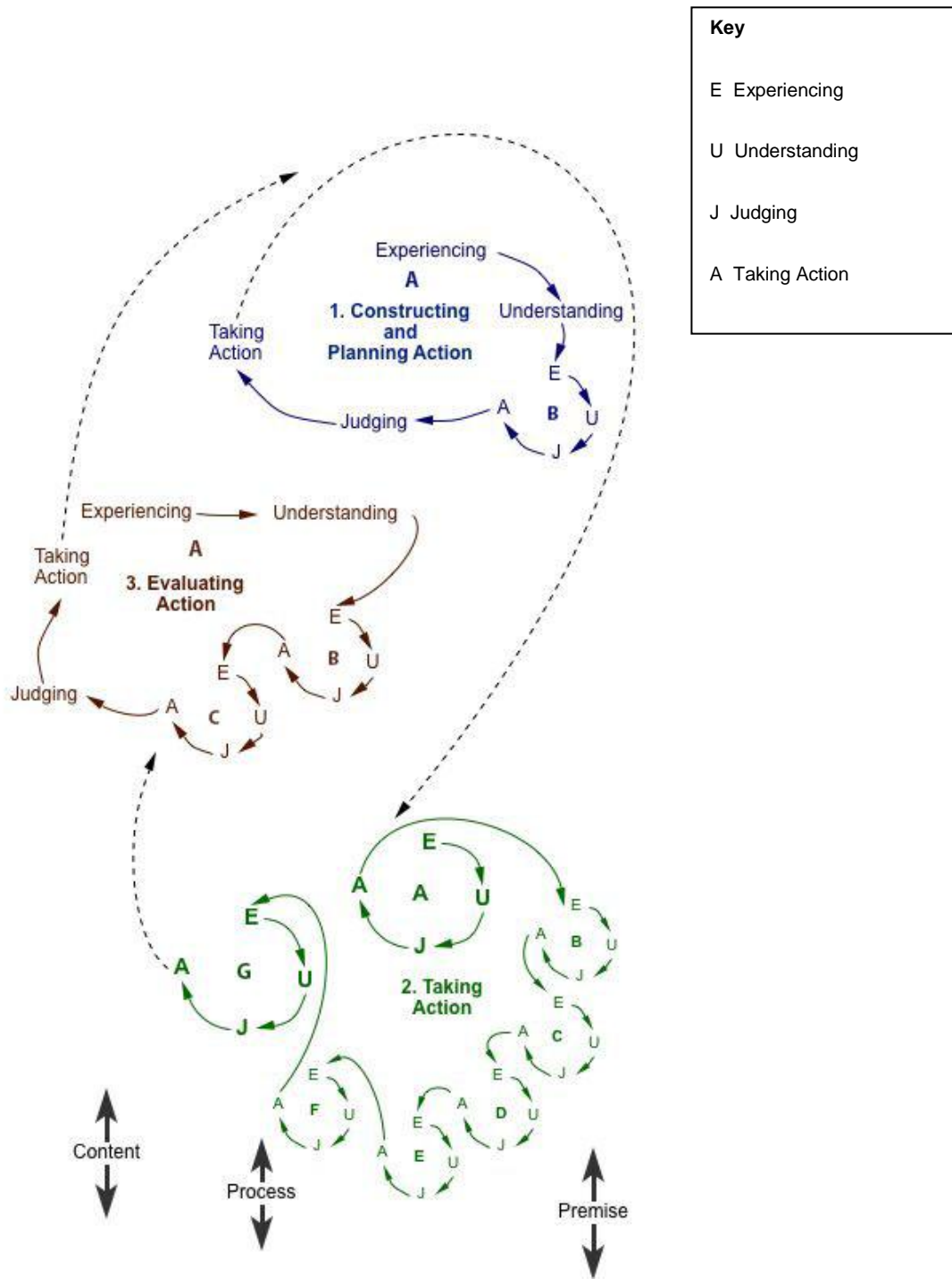


Figure 6. Phases 1, 2 and 3 with the cycles within each phase - based on the General Empirical Method (Coghlan & Brannick, 2014)

Table 8. Summary of cycles, steps, participants involved and activities undertaken in each of the three phases

Phase 1	Cycle	Steps and dates	Participants	Activity
	A	Experiencing Nov 2014 - July 2015	<ul style="list-style-type: none"> • Action group • Health professionals 	Group discussion 8 interviews
	A	Understanding May 2015	<ul style="list-style-type: none"> • Action group 	Group discussion
	B Additional cycle	Experiencing, Understanding, Judging & Taking Action July 2015	<ul style="list-style-type: none"> • Midwifery leadership, advisor and educators 	Additional meeting as requested by Midwifery Leader for midwives Group discussion
	A	Judging July 2015	<ul style="list-style-type: none"> • Midwifery leadership, advisor and educators • Action group 	Group discussion Group email
	A	Taking Action May 2015 – July 2015	<ul style="list-style-type: none"> • Midwifery leadership, advisor and educators • Action group 	Group discussion Group email Group discussion
Phase 2				
	A	All steps (Experiencing, Understanding, Judging and Taking Action) July - August	<ul style="list-style-type: none"> • Myself • Action group 	Content development Recording of stories (Māori Midwifery Advisor, Registrar and myself) Technical advice from CfLAT Advice from supervisors Email discussion
	B Mini cycle	All steps August 2015	<ul style="list-style-type: none"> • Clinical Directors (two) 	Meeting
	C Mini cycle	All steps August 2015	<ul style="list-style-type: none"> • Psychologist 	Meeting Email discussion
	D Mini cycle	All steps August 2015	<ul style="list-style-type: none"> • Occupational Health Manager 	Meeting

E Mini cycle	All steps September 2015	<ul style="list-style-type: none"> • Human Resources • Clinical Director • Theatre manger • Business Intelligence 	Group discussion
F Mini cycle	All steps October 2015	<ul style="list-style-type: none"> • Maori Midwifery Advisor 	Meeting
G	All steps November 2015	<ul style="list-style-type: none"> • Action group • All participants involved up to this point also invited 	Email circulation of eBook Group discussion Proposal for evaluation presented
Phase 3			
A	Experiencing January 2016 – April 2016	<ul style="list-style-type: none"> • Health professionals (12) • NZCOM members (15) 	Interviews Email feedback Group presentations Survey
A	Understanding January 2016 – April 2016	<ul style="list-style-type: none"> • Researcher • Action group 	Themes identified
A	Judging April 2016	<ul style="list-style-type: none"> • Action group 	Group discussion
<i>B Embedded cycle</i>	All steps May 2016	<ul style="list-style-type: none"> • Content experts 	Email revisions
<i>C Embedded cycle</i>	All steps May 2016	<ul style="list-style-type: none"> • Action group- sub group 	Group discussion
A	Taking action July 2016 – August 2016	<ul style="list-style-type: none"> • Action group • ADHB Leadership team • Researcher 	Endorsement Presentations eBook linked to web

5.3.8 Quality action research - authenticity

Authenticity was added by Guba and Lincoln (1989) to their existing list of principles of credibility, confirmability, dependability, transferability for evaluating trustworthiness in qualitative research as the latter were developed to match the positivist criteria of validity. Authenticity acknowledges the subjective nature of data and that truth is obtained through intelligent collaboration. In establishing authenticity I needed to ask what change had occurred in participants and how the study had instigated improvement (S. Johnson & Rasuloova, 2016). Although action research need not only encompass qualitative data, authenticity is key (Coghlan & Brannick, 2014). Specific criteria are outlined by Guba and Lincoln (1989) to demonstrate authenticity and these are made explicit throughout the study. These principles are fairness (identifying different points of view and enabling all to be represented), ontological (capturing the participants' personal growth and recording it within the study), educative (capturing increased understanding of each other and the collective agreement), catalytic (collective agreement to take action based on the increased understanding) and tactical (empowered to be able to take that action) (S. Johnson & Rasuloova, 2016). Guba and Lincoln (1989) argue that authenticity extends beyond the quality of data collection and methodology. Authenticity was achieved through being attentive to the experiences or data, being intelligent, making reasonable judgements and taking responsible judgements as described in the previous sections. Throughout the study I continuously questioned and reviewed what I was doing and how that was influencing the study. I recorded this information in my journal and referred back to it as I reflected on what would be happening next. My own perception of the situation or goals for the research outcomes could have blinded me to the reality in front of me, either consciously or unconsciously. This is a danger of both action research and insider research. Rather than the quality of the data potentially affecting the authenticity of the study Coghlan (2008) proposes that it is what the researcher does, in "being attentive, intelligent, reasonable and responsible in engaging with the challenges of action research" (p. 351) that is important.

At the second person level authentic collaboration is required. The project aimed to improve practice for those in the study and the wider community of National Women's Health and it was important that this remained a focus when I was also pursuing the doctorate. Herr and Anderson (2015) warn it was important that the relationships were

legitimate and not created in tokenism. There were times that this was challenging when participants took a passive role. Through reflective consideration this was identified and made visible in the action cycles. Strategies were implemented to facilitate deeper collaboration. However, this remained an area for personal growth to take forward for future studies. It is not possible to be as we should in all situations and the best decisions may not occur. Authenticity is not a step by step process however, but rather there is a “pull and counterpull of trying to be authentic” (Coghlan, 2008, p. 362). Through being aware of what I was doing, and transparent in the choices made following sufficient reflective space I made the study open for judgement on its worthiness. The next section will expand on the reflective nature of action research and how I integrated it into this study.

5.3.9 Reflexivity

Reflexivity is defined as, “being attentive to and inquiring into the process as it unfolds” (Coghlan & Brannick, 2014, p. xxi). It is the activity that assimilates action and research. The previous section has highlighted the importance of being attentive at all levels. The following paragraphs will expand on how this was done in the study through reflection.

There are many definitions of reflection. Much of the writing has been influenced by Schön (1983) through his book, *The Reflective Practitioner: How Professionals Think in Action*. In this book he unpacks the notion of reflection-in-action, when the health professional, “becomes a researcher in the practice context” (Schön, 1983, p. 68). It involves stepping back to question the experience in order to understand it better and to take new action. As with pragmatism and action research it is a problem or puzzling situation that initiates the process of reflection. It is the moments that surprise us that stimulate reflection, rather than when things occur as expected; “when intuitive performance leads to surprises, pleasing and promising or unwanted we may respond by reflecting-in-action” (Schön, 1983, p. 56). It brings value to learning beyond technical expertise.

After each interview, action group discussion, supervision meeting and other ad hoc encounters I wrote in my journal as mentioned previously. The areas I focused on were the content or subject matter, the premise or underlying assumptions and the process of action research (Coghlan & Brannick, 2014). This followed a reflective process, often

during the drive home. The questions in the model developed by Gibbs (1988/2013) guided my thoughts, the model being one used with the students where I taught at the AUT University. It was familiar and worked for me. The steps include; initial experience (the encounters with participants etc), descriptions, feelings/reactions, evaluation, analysis, conclusions (general and specific) and concluding with personal action plan (Gibbs, 1988/2013). A summary of these reflections has been recorded in Chapters 6, 7 and 8 after the description of each step in the action cycles.

During the phases of the action research I needed to balance my eagerness to complete the project with taking time to reflect on each step. It is not possible to hasten the process or allocate specific boundaries; reflection happens in moments over time. Heron (1996) cautions about the need for an adequate balance between action and reflection to ensure validity. Too much action leads to the inquiry becoming “supersaturated with experience: no adequate, coherent findings can be distilled out of it, or refined in it,” (p. 141), and too little, “will result in conclusions with low validity” (p. 141). And as Dewey (1910, p. 74) states, “the essence of critical thinking is suspended judgment.” Reflexivity is integral to the validity of this study as it unpacks and makes transparent my personal learning and growth in undertaking a collaborate project to facilitate health professional wellbeing following a critical incident.

5.4 Action research that is ethical and valuable

As stated by Coghlan (2016, p. 101) “practical action is driven by values and is fundamentally ethical.” The priority is undertaking research that ensures the participants are protected as they contribute to the study. The principles of ethical action research and the ethics approval processes are outlined below for this study.

5.4.1 Ethical action research

The ethics applications were approved at each stage, however the institutional ethical process is not designed for action research, an issue acknowledged in the literature (Brydon-Miller, Aranda, & Stevens, 2015). Ethics applications require applicants to outline the specific research proposal, data collection methods and participants to be involved in advance which contradicts the collaborative, evolving process of action research. The action to take would be decided by the action group after reflection on the collected data had occurred, the outcome of which cannot be predicted in advance. To

accommodate the formal ethical requirements an initial specific plan was submitted which was then amended, as listed above, according to the action group decisions.

Holian and Coghlan (2013) highlight a further ethical difference pertinent to insider action research. Of particular note is the risk of first person inquiry and the need for researchers to be “made aware of the potential for negative impacts on their career, and their health and wellbeing and have put processes in place to monitor and deal with issues should these arise” (p. 403). In the prior ethical considerations I had identified that there could be potential effects on me through involvement in people’s distressing stories. During the study I took breaks from the subject matter, however I did not heed Holian and Coghlan’s warning to ensure I accessed appropriate support for myself during the study. This was first person learning that has been expanded in the final chapter of the thesis.

Role duality for insider researchers is another key ethical consideration (Holian & Coghlan, 2013). I had information and experience that contributed to my knowledge of the current situation in National Women’s Health that had been gathered outside the research boundaries. I could not use this information as data for the study but needed to acknowledge its impact, as was done in the pre-understandings in Chapter 1 and through the first person reflections throughout the study. As stated by Coghlan (2013, p. 344), “we ourselves are the first person of ethical action.”

My insider position, combined with the collaborative nature of the project meant that data collection often happened via impromptu conversations with health professionals that snowballed to others in the shared office. Emails would be sent and others added to the email list. A consent form had been completed but the information sheets had not been constructed in a way that captured this type of data collection. I followed the process of having the consent forms completed at each group or individual planned meeting but it would have ‘lost the moment’ if I had required a form to be signed prior to the rich ad hoc conversations. Consent forms are traditionally formal, however there is the potential for a more “flexible covenantal agreement which is monitored and re-negotiated as the research develops and progresses over time” (Holian & Coghlan, 2013, p. 409). This was not considered for this project however in hindsight could have been advantageous.

5.4.2 Ethics approval for the study

Ethical approval was applied for and granted by Auckland University of Technology Ethics Committee (AUTEC) on 16 October, 2014. Approval was also gained from the Auckland District Health Board Research Office, Māori Research Committee and National Women's Health prior to the study commencing (Appendix B). Further applications were made to AUTEC for modifications to the study design as the action research unfolded. These occurred on the following dates:

- 19 March 2015 Minor amendments to recruitment criteria;
- 6 July 2015 Minor amendments to the data collection protocols (collection of critical event story); and
- 8 December 2015 Minor amendments to data collection protocols.

The application to ADHB was for a low risk study (Appendix A) and was approved on October 2014. The application included approval from the Māori Research Committee for Waitematā and Auckland District Health Boards (Appendix B).

5.4.3 Confidentiality

Participants, who took part in formal interviews and discussions within the action group, were recorded. They received an information sheet explaining this and completed a consent form (See Appendix C). There was time for questions and reconsideration before recording commenced. Participants who were interviewed as part of the first cycle were asked for permission before any quotes were used in the summary provided to the action group and also for inclusion in the resulting eBook and in this thesis. A specific consent form was developed and approved by AUT Ethics Committee to allow for recording of stories to include in the eBook as anonymity was not possible for the health professionals who gifted these stories. The two transcriptionists employed to transcribe the individual interviews and group discussions completed a confidentiality agreement (Appendix E).

The formal aspects required of research to ensure it is ethical and value driven have been outlined. Less formally but as important is their threading through all the processes and actions taken in the study to ensure they add value. The aim of the study is to explore how health professional wellbeing can be facilitated, in the aftermath of a critical incident, through the development and evaluation of a support package. The

reader will be taken through a journey, in this thesis, that demonstrates value has been added to the health professional's world of practice that was created through ethical action research.

5.5 Writing the thesis

Writing up the findings for the organisation and participants creates a different report from that of the Doctorate. According to Coghlan and Brannick (2014) writing is a separate process yet integral part of completing the action research. Further understanding and learning occurs through the writing process (Thomson & Kamler, 2016). As the action research progressed with the health professionals within National Women's Health I was also engaging in my own "learning-in-action" as I went through the cycles (Coghlan & Brannick, 2014, p. 30).

As discussed in Chapters 1 and 4 action research appeals as it involved 'doing' something that would improve, a common trait of action researchers (Zuber-Skerrit & Fletcher, 2007). This can lead to a lack of reflective learning as a researcher. My first person journey captured in the writing, shows a personal growth as I moved from a focus on the action part of the study to an equal focus on reflection. The aim in writing this thesis was to capture the story of the action research, the reflective processes throughout and the contribution to practical knowing.

5.6 Conclusion

This chapter has discussed in detail the method of action research undertaken in this study. Coghlan and Brannick's (2014) General Empirical Method of insider action research formed the basis for the phases, cycles and steps utilised. A common understanding of the everyday problem of critical incidents was achieved by the action group in this study through using existing knowledge to guide the decision to gather local stories from health professionals in the Constructing and Planning Action phase about what had helped them. Close attention to the participants taking part in the study and their social construction of the problem area was built into the steps in the cycles. Multiple voices needed to be heard and the flexible nature of action research allowed for the inclusion of additional cycles and mini-cycles to capture those that needed to contribute to the developing practical knowing. Ethical action research requires both protection of the participants and attentiveness to the decision points throughout the

study. Part III of the thesis makes up the Findings and Discussion section. The three chapters tell the story of the three phases, the reflection at critical points of the cycles and practical knowing that evolved about how the development and evaluation of a support package could facilitate health professional wellbeing. The chapters are:

Chapter 6, Phase 1: Constructing and Planning Action - Aftermath of Critical Incidents;

Chapter 7, Phase 2: Taking Action – Creating an Interactive eBook; and

Chapter 8, Phase 3: Evaluating Action – Evaluation of eBook in Practice.

PART III – FINDINGS AND DISCUSSION

Chapter 6. Phase 1: Constructing and Planning Action - Aftermath of Critical Incidents

This chapter will draw together the stories, discussions, context and personal experiences that shaped the research beginnings or the Constructing and Planning Action phase, which includes the first two cycles of this action research study. The gathered data is processed through the steps of experiencing (being attentive to the data), understanding (making sense of the data), judging (being reasonable with the data) and taking action (making reasonable decisions) which were explained in Chapter 5. The activities undertaken or the story of “what happened” in each step of the cycle is described followed by my reflections on the premise, content and process of these activities at first, second and third person level. The second section in the chapter addresses the understanding developed that explains how it is for health practitioners following a critical incident. The learnings are framed within the characteristics of Coghlan’s (2016) practical knowing. Complexity theory is used to analyse the learning with understanding also provided through social constructivism; identifying the need for change and a planned path to improving support that informs the next phase of Taking Action.

6.1 Gaining insights – the story and reflections

The action research cycle consists of collaboratively working through the steps of experiencing, understanding, judging and taking action as depicted in Figure 7. Phase 1 included a main cycle, Cycle A and a mini-cycle, Cycle B. As each stage of the cycles progressed there was a time of reflection before the next step. After a meeting I recorded my impressions of the discussion in my journal. The meeting, either individual interview or group, was transcribed. Listening to the meeting again and reading the transcript provided a different perspective from what I had presumed was happening in the meeting. The reflective activity recorded in the study was predominantly my own with that of participants only captured in the discussion meetings through my lens. Figure 7 shows in diagrammatic form the three phases of the study with Phase 1 highlighted. Table 8 in Chapter 5 displays a summary of Phase 1; the cycles, steps

within the cycles and the participants and activities completed in each step. These are expanded on in the following sections.

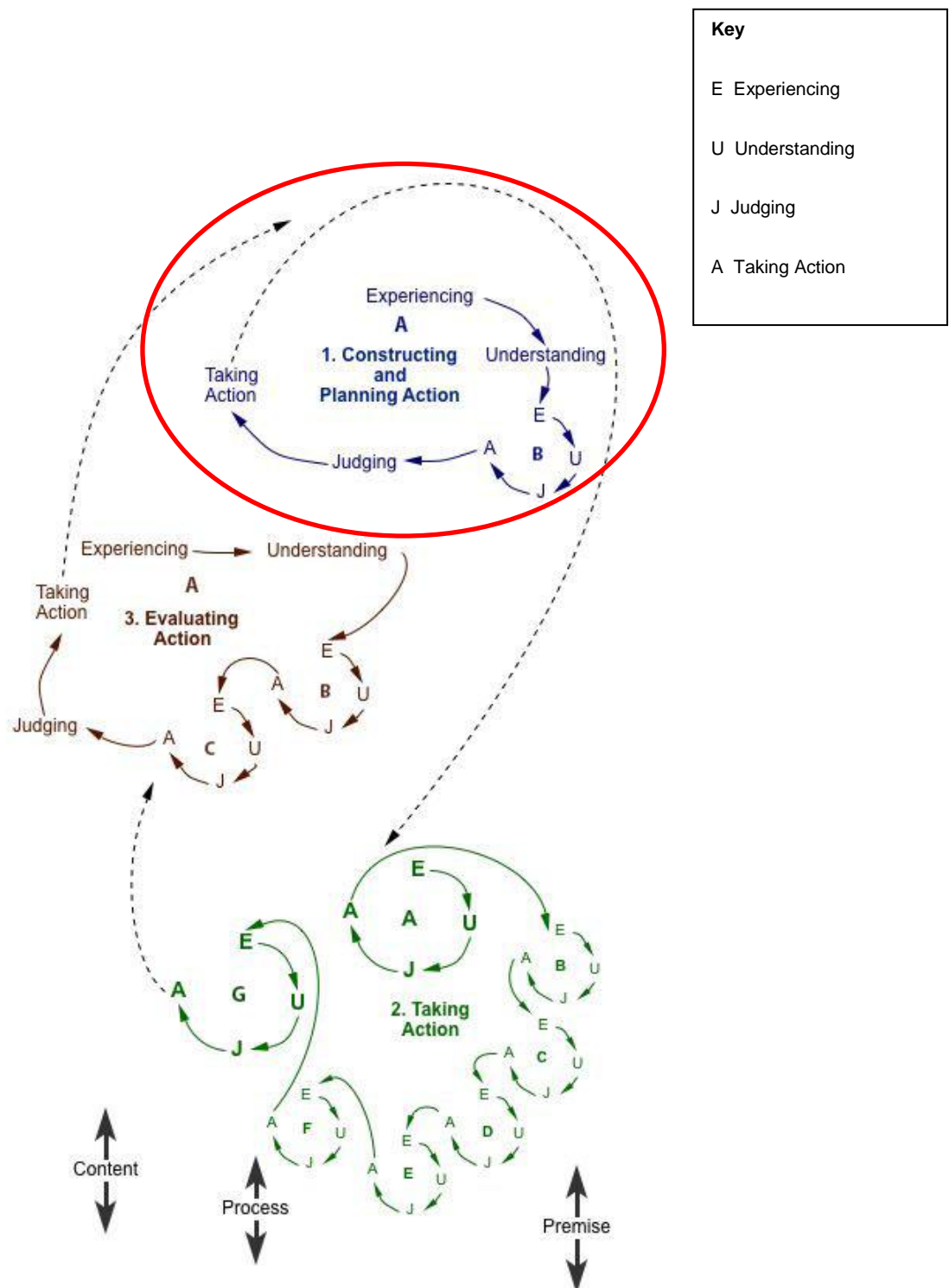


Figure 7. Three phases of the study with Phase 1 highlighted

6.2 Cycle A

6.2.1 Experiencing – gathering data on how it is in practice

The first step in knowing is experiencing, when we interact with what is around us to gather data, as described in Chapter 5. In Cycle A this involved setting up the action group where the decision was confirmed to undertake interviews with health professionals. Alongside, the action group members and I brought our own experiences and the knowledge of the organisation to provide contextual data.

Action group meetings

The action group meetings were organised for key decision points in the study. The initial meeting was to present the proposal that had been approved by the AUT Ethics Committee and the academic institution for my doctoral requirements. Although the research proposal outlined the intent to undertake interviews of health professionals the action group was able to influence how that plan was undertaken within National Women's Health. The group contributed local knowledge on how to gather participants, what was important to know and areas of concern. The themes gathered from the interviews were brought back to the group meeting. The participants in these meetings provided further experiences that added to the 'data' collected.

Gathering the stories

An initial gathering of experiences from health professionals of critical incidents and the following support was undertaken via individual interviews. An invitation for participants was sent out via the National Women's Health email distribution lists which included Lead Maternity Carers. Posters were placed in prominent places and I met with teams at their regular meetings. Members of the action research group promoted the study within their professional groups. I also encouraged people to participate face to face by explaining the study and letting them know how to make contact if they were interested. Eight health professionals agreed to be interviewed and the details of these participants were outlined in Chapter 5.

The focus of the listening followed the questions "tell me about a time when you were involved in a critical incident" and "what helped you through this experience?" The participants defined what they considered critical to them. The stories were digitally recorded, transcribed and analysed.

Organisational processes and guidelines

Local and national policies were reviewed for their guidance on how the organisation was to support health professionals. The Auckland District Health Board has a policy titled Critical Incident Stress Management (Auckland District Health Board, 2014a). The policy defines a critical incident, outlines the organisational actions of defusing and debriefing and how these should occur. The Reportable Events policy (Auckland District Health Board, 2013) includes the requirements of reporting and reviewing critical incidents within a systems approach and is based on the National Reportable Events Policy (Health Quality and Safety Commission, 2013b).

The senior leadership team was kept informed of progress on the study and I met with them to discuss planned action prior to it occurring such as the interviewing of health professionals.

My own knowledge and experience

My pre understandings are outlined in Chapter 1 and contribute to the action research as personal experience, insider knowledge and skills in managing the review of critical incidents. At this point of the study I held the role of Clinical Governance Coordinator for National Women's Health at Auckland District Health Board. This role gave me knowledge of the incidents in the service and the follow up that had occurred. I was sometimes the recipient of feedback on that process. It was also a role that required engagement with multiple departments and their members that I would not have had in my previous role as a clinical midwife. As a midwifery lecturer and doctoral student I also had access to resources to explore the topic further such as library databases.

Reflection – where the experiences came from

Initially taking time to reflect felt like progress was being delayed but early in the study I began to realise how it was such an integral part of action research. It enabled insights and understanding to be gained, as shown below and throughout the rest of the study.

Action research is participatory and collaborative with the aim of making heard the voices, yet what voices were heard in this study? An invitation was distributed to all employees in National Women's Health and Lead Maternity Carers (LMCs) via posters and email distribution lists. Participants were given equal opportunity to be involved from my perspective. However, examination of the socio-political context of the

potential participants shows that in fact opportunity may not have been equal. The health professionals needed to feel comfortable to put themselves forward and have the time to physically take part. Hospital employed midwives used their personal time to take part which was not the case for most other health professional groups. The potential participants needed to understand that the invitation related to them. One participant had told her powerful story of the effect of a stillbirth informally prior to the study but when the invitation came out she did not think it related to her experience. She was not sure whether that was considered critical. She had minimised her interpretation of her experience.

All but one health professional who came forward to be interviewed, knew me. It could be presumed that my insider position had influenced people's decision to take part. There will have been unknown variables also that influenced potential participants in receiving the invitation and making the decision to participate equal. Freedom to choose to contribute to the study may not have been an actual reality. It is important therefore that I acknowledge that the voices of the participants in the study may only represent those who were not limited by the restraints or barriers present within the current organisation climate (Higgenbottom & Liamputtong, 2015).

6.2.2 Understanding - patterns and themes in the data

The use of stories helps unpack the underlying dynamics in a complex system (Burns, 2015). Understanding these dynamics provides insight into what happens in practice and helps identify the points where change can occur. The themes from the interviews were identified and presented to the action group. To gain understanding the participants focused on the problem area (support following critical incidents) and asked questions such as "what does this mean?" and "what does it say about facilitating health professional wellbeing?" The group was looking for "patterns in the data" (Coghlan & Brannick, 2014, p. 23), some of which had been identified by me prior to the meeting. The group participants checked the themes against their impressions of the interview data presented and their own experiences to see if they fitted. During the meetings participants also identified an incongruence between the shared stories and what was outlined in the policies mentioned above indicating they were being adhered to in an ad hoc manner or in a way that was not helpful. The following section expands on the process of developing the themes from the interviews.

Thematic analysis of the stories

The interviews were transcribed and themes identified using Braun and Clarke (2006) as described in Chapter 5. This process required understanding or identification of patterns by the person doing the analysis which was me. The focus was an inductive process that looked for any themes relating to what helps the health professional following a critical incident. The transcripts were read and reread to identify these themes. Although I had read the literature relating to incidents in health care this was not directly used to guide the development of the themes but will have influenced my understanding of the topic. As is consistent with the pragmatic views of Dewey (1910), understanding can only start with a problem and this is where the participants began as they shared their stories of what went wrong, followed by what they found helpful. Braun and Clarke (2006) speak of finding “repeated patterns of meaning” (p. 87). From a social constructivist perspective the stories also provided understanding of the social construction of meaning of actions in the aftermath of critical incidents.

Nine themes were developed through this method of thematic analysis. The first six themes came from the data gathered in the interviews and were presented to the action group and to the midwives in Cycle B. Following discussion with the midwives and action group the additional three themes were included. Collaboration provided both validation of the analysis I had undertaken and built on these themes from their leadership and personal experiences. The themes below are examined in detail as a foundation for planning the action for Phase 2 in the second half of this chapter.

1. Am I still OK? - Validation of self as a competent health practitioner.
2. How can I improve? - Reflecting on practice.
3. How are others affected? - Gathering of the group.
4. What will happen next? – Need for information.
5. Who can I talk to? – Identifying the champions.
6. How do I keep working? – Need for space.
7. How should I talk to the woman and her family?
8. A colleague has been involved in an incident - How can I help?
9. I am a manager and one of my team is involved in an incident - What advice and support should I provide?

6.2.3 Mini Cycle B – ensuring midwifery voice heard

Following the action group meeting I was asked by a midwifery leader to organise an additional meeting with other midwives. When I read the transcript of the meeting in Cycle 1 it was clear that the medical staff had provided more input into the discussion than the midwives. The midwifery voices were not being captured and the midwifery leader wanted another opportunity for this to happen. An additional cycle of experiencing, understanding and judging was undertaken with a group of midwives with both clinical and leadership roles. Their stories and discussion were combined into the analysis above that led to the judging of what action to take. There was a standing back from the data to question what was happening in National Women's Health that was or would be helpful in facilitating wellbeing.

Reflection – personal response to the stories

Listening to health professionals share their stories of critical incidents was difficult as there were many stories of grief and an overwhelming sense of needing to improve the situation. When people asked me about my research topic they often shared a personal story of their own despair. These stories were often from many years previous and associated with deep emotion. Many were so intense that I found myself needing to take breaks from reading the transcripts or the literature.

6.2.4 Judging - action groups analysis

The themes above were presented to the action research group. Time was allowed for discussion of each point where the participants were encouraged to comment on, verify and add to. Following discussion of each theme a consensus was sought on the individual themes and the actions that could be taken in relation to the topic. The need for education for managers or clinical leaders was identified, alongside the information on accessing support and review processes. The group decided the themes were valid but found gaps in the data collected. For example one action group participant stated:

I reckon there is one thing missing ...One of the big things is what do my colleagues think of me? Do my colleagues still respect me and trust me? And I think that is hugely important because we function in teams (Action group participant).

They also wanted further areas added from their leadership perspective. These were documented and added to the list from my preliminary identification of patterns or

themes. The meetings were recorded, transcribed and then reviewed by myself to ensure the discussion and decisions were captured as presented in the meeting.

Decisions in the group were made through collaborative discussion to gain a consensus about how to use the data of health professionals' experiences following a critical incident and how that could improve the support within the context of Auckland District Health Board. The possibility of an electronic resource was discussed in response to the themes presented and the voices of the participants. The negative aspects of not involving immediate human interaction after an event were weighed with the safety of gathering information in private. The following participant summarises the stance for the group:

In terms of an electronic resource it's an option. It's part of the equation but I don't think it would be the full thing that you just go there (Action group participant).

There was a search for validity and certainty of understanding in the meaning of the data. The voices from the interviews were combined with the personal experiences of the action group members and from working with others in National Women's Health. The policies which were intended to provide guidance were not working in the reality of busy clinical practice.

Reflection – what influenced the judgements the action group and I had made?

As the facilitator of the research I was faced with stories of what “we used to do” which distracted from the present moment. The study needed to be situated in the context of Women's Health in the 21st Century. Agreement was achieved yet there remained the situation of whether the direction of the study was being influenced. I found myself seeking criticism to know that the participants were truly engaged in the project.

Within the group discussions I aimed to facilitate equal opportunity for participation, however I found this was not possible. I then needed to critically examine the reason, facilitate alternative ways of making those voices heard and acknowledge the consequences. The voice of management was the most powerful as this group had the ability to halt or promote the project at any time.

6.2.5 Taking Action – plan to create a critical incident eBook

The judgement to take action was based on two aspects; the agreed belief that improving support was a valuable area to address and that there were practical and achievable actions that could be taken. Together with the action group the decision was made to develop the themes into chapter or subject headings for an electronic eBook. This would ensure that each of the areas to facilitate support would be addressed. I developed a draft structure of how such a book could look and presented this to the group. The rationale provided for it being electronic was based on the concern about who were safe people to talk to and the ability of an electronic resource to be easily accessible. Figure 8 below shows the themes as proposed chapter topics and the sample that was presented to the action group.

1. I feel really upset after what happened. Everyone else seems to be coping better. Emotional trauma after a critical incident is common and most likely others are hiding the same feelings you have. Listen to others share how they have felt after a critical incident.

2. I have been asked to meet with those involved in the incident. What does this involve? There may be an initial get together after an event, followed by a more formal meeting. Find out how these can be beneficial.

3. I need to talk to someone. What are my options? You may feel comfortable talking with a colleague or manager however often you may want someone external to the incident or your service. There are other people you can talk with.

4. I am worried I did something wrong. Most health professionals are worried about making a mistake. In reality all health professionals make mistakes but we rarely talk about them. By reflecting on and sharing our mistakes we can facilitate learning.

5. How should I talk to the woman and her family? It is important that we communicate well with a woman and her family are after an incident. The senior person in the team should support you. There are key principles to follow when meeting with the family.

6. I don't feel competent to practice anymore. A critical incident can lead to doubt your ability to continue being a health professional. Listen to others share how they have felt after a critical incident.

7. The incident is being investigated. What will happen? Many serious events will be investigated to identify systems issues we can learn from. Find out what a RCA, RAMP or case review will involve.

8. A colleague has been involved in an incident. How can I help them? The attitude and comments of others can affect health professionals emotionally after an event as well as how they continue to function within the team. Find out what is helpful.

9. I am the most senior person on the duty. How do I help my team members? There are important things that need to be done immediately after a critical incident and before people go home. The support provided can make a difference for those involved.

10. I am a manager and one of my team is involved in a critical incident. What advice & support should I provide? There are various supports that can be offered after an event. A key factor in their success is the underlying attitude and approach of the organization. Managers are key to making a difference.

What do you need at the moment?
Click on the relevant box



2

Figure 8. Draft contents page of eBook

This first section has described the action cycles and steps in Phase 1 and my reflections that have led to the decision to take action in the form of an interactive eBook that would address each of the themes identified. Through the collaborative and reflective process an understanding of the system in the aftermath of critical incidents within National Women's Health has evolved. The practical knowing of how it is for health professionals will now be examined in detail.

6.3 How it is in practice after critical incidents

This section provides insights into the complex system of how it is in the aftermath of a critical incident developed through Phase 1. These insights are the basis for taking action with the aim of exploring how the development and evaluation of support package could facilitate health professional wellbeing. The stories and discussion confirmed that support after critical incidents is an issue in National Women's Health. The action cycle steps have provided a practical knowing of how it is in the system. The themes from the data gathered are presented within and linked to the framework of the four characteristics of practical knowing (Coghlan, 2016) as listed:

Everyday concerns of human living

- How are others affected? - Gathering of the group
- How do I keep working? – Need for space

Socially derived and constructed

- What will happen next? – Need for information
- Who can I talk to? – Identifying the champions

Uniqueness in each situation

- How can I improve? - Reflecting on practice

Driven by values and ethics

- Am I still OK? - Validation of self as a competent health practitioner
- How should I talk to the woman and her family?
- A colleague has been involved in an incident - How can I help?
- I am a manager and one of my team is involved in an incident - What advice and support should I provide?

Analysing the system through the lenses of complexity theory and constructionism enables the identification of areas that need changing and how these underpin the planned actions in the next phase, Phase 2 Taking Action.

6.3.1 Happens to most, shared by few – everyday concern of health professionals

Practical knowing is focused on the common, everyday happenings in the world. In Chapter 2 the literature review identified the regular occurrence and the varied nature of critical incidents in health care. I had initially selected the topic for the action research from my own concerns, however the project aim was quickly adopted by the action group and my concerns supported by the interview participants. Being involved in a critical incident is a common event yet few shared their experience of this ‘everyday’ type happening. The theme *How are others affected? - Gathering of the group* illustrates the quietness about such events and the relief when the health professional realises others are also affected. Emotional distress after an event is commonly described in the literature and this was echoed by the participants of this study. Yet they were surprised when they found others were also affected. Meeting as a group after an event demonstrated to the individual the impact on others, sometimes those they had not expected.

The orderlies were really shocked, they were just outside taking their samples, it didn't occur to, click to me how much it would shock them as well (Constructing and Planning interview 1).

Several participants spoke of the value of a group discussion after the event with those involved. When these meetings included the broad range of people involved in health care provision and provided the opportunity for sharing of feelings, individuals were able to appreciate the impact the event had on all practitioners, including those who were on the periphery such as orderlies.

So the next day they got everybody together who had been involved who wanted to be there in a closed session which was to be confidential and everybody told their story, from the orderly, everybody who wanted to be there came. So we had the orderlies, everybody...So I found that incredibly helpful. I found that very helpful process to go through. And there was all the way down from consultants to orderlies, it was everybody who had been involved who wanted to come (Constructing and Planning interview 1).

Without a meeting being organised the health professional continued to believe it was only them affected in such a way. This was the case for the participant in interview 4 until she attended a meeting with 50 people. The group gathering acknowledged the significance of the event and was not about her as an individual.

I just remember feeling that because it was happening it validated for me that this was a huge event. Like all these other people were worried and needing a debrief. That the meeting wasn't about me, it was about how everybody had acted. It wasn't about me and my client (Constructing and Planning interview 4).

The following interviewee felt that the significance of a particularly bad day, due to an accumulation of events could be acknowledged. She thought others would also be affected as she was but without a group gathering or even an email that acknowledged the stressful events there was no validation that this was the case:

...there could have been like a ward debrief of the whole day because it wasn't just, wasn't just me (Constructing and Planning interview 6).

Meeting as a group after a critical incident starts to move the focus from the individual to the multidisciplinary team that surrounds the event. Some participants used the term debriefing but others described getting together to check everyone was OK and discuss what happened from each person's perspective. The gathering together symbolised the magnitude of the event and validated the individual's feelings. Although the feelings experienced appeared common amongst health professionals there appeared to be an assumption that the individual was alone.

In a similar way the everydayness of critical incidents was not captured in the practical needs of staff. Some staff needed time out but this was generally not offered. The permission to have space is contained in the theme, *How do I keep working? – Need for space*. The interviewees spoke of the need to take time out. This may have been for a short time or an extensive period of leave. One practitioner spoke of needing months off before being able to attend another birth. For others it was shorter:

I had a couple of weeks off work, which I'd never done before or since. But it really affected me that case. And um I think it was a critical time of my career ... (Constructing and Planning interview 1).

Another participant spoke of coming to work as she presumed that was what she was meant to do despite knowing she was not in the right space to do so:

...so that was on the weekend and then on the Monday no one from the service found me to check if things were alright until one of the consultants found me crying in the lifts ...so I came to work because it was assumed that you would and I know there's been other registrars who've had similar really bad outcomes who have turned up to work from the night shift and clearly aren't going to be able to look after women but there's nothing in place for that to say it is OK to stay home (Constructing and Planning interview 5).

When asked what advice they would give to their colleagues, the participant in interview 8 had the following to say:

That's the main things I'd say people just not being able to give themselves permission to stop when they need to or to create space if they need to (Constructing and Planning interview 8).

Each person identified a need to be removed from the work environment after a critical incident where there was space from the ongoing business of being expected to provide care as usual. This is a practical need that was required by interview participants and recommended in the literature yet there was no regular provision to offer it. The reaction by some members of the action group indicated that they believed such a need was only required by some professional groups, and others were able to keep going. However, the need was demonstrated across professional groups in the interviews.

In Scott and colleague's (S D Scott et al., 2010) study the most common characteristic stated of a support program was to have "an institutionally sanctioned respite away from the care environment immediately after an event to allow the second victim to compose him - or herself before resuming patient care" (p. 235). In the area of safety and quality improvement, health care has tried to learn from aviation. Time out is not one of those learnings that have been transferred (Stiegler, 2015). Using the example of the US Airways Flight 1549 in 2009, which hit birds shortly after takeoff and landed in the Hudson River, Stiegler highlights the absurdity of expecting health professionals to continue practising after a critical incident without a moment to pause.

No one would have considered pulling Sully or Skiles or the flight crew members out of the river and asking them to head back to La Guardia and fly another leg. Yet in medicine, physicians are generally expected to continue

caring for patients, sometimes without even a brief period of time to reflect or regroup (p. 361).

The data from Phase 1 shows that facilitating support following a critical incident is a real, everyday issue from my perspective, and also the perspective of other individuals, the collective action group and the organisation. Health professionals are similar in their desire to be supported by colleagues after a critical incident yet this is frequently different to what they are receiving from each other in the Service.

6.3.2 Interpreting the situation - socially derived and constructed

The second characteristic of practical knowing is that it is socially constructed. A common understanding is built through working together, an understanding built on gathering the many different meanings individuals have aligned to actions in the aftermath of critical incidents. Participants interpreted whether they were to blame by the response of the organisation, either for the event they were involved in or by observing the experiences of others. The action group processed the interview data through the steps of experiencing, understanding, judging and taking action to validate and add to the identified themes. There was a realisation that the interpretation of activities that occurred after a critical incident were not independent of the socially constructed meaning of each health professional. The collaboration provided opportunity to share the various viewpoints of the different health professional groups. The members of the action group perceived there to be differences in support required depending on the professional group however this was not shown in the interview data in this study.

Following are some examples of actions or inactions being interpreted by the participants as they shared their stories in the interviews. There was a need for information, to know what would happen next to prevent incorrect assumptions being made, captured in the theme, *What will happen next? – Need for information*. After a serious critical incident there is often a formal review by the organisation. Participants talked of having limited information about what would happen next after such an incident. The participant in interview 4 interpreted the lack of information around the subsequent review process as an indication she must have been at fault. The participant below talked about her experiences of being involved in these reviews.

Quite cold... we've got these questions for you and we're asking for answers... you're not involved in the conceptualisation of it...quite powerless to actually. It feels sometimes like a view is being formed and certain things are being emphasised that you didn't have any back and forth about in terms of nuancing... (Constructing and Planning interview 8).

Massive long review process which, I've never seen any outcomes or results. So at the time it's quite intensive and everything's been kind of highly scrutinised and looked at. You have to participate in interviews and things but there's no feedback from that. That closes the loop and a couple of years has gone past (Constructing and Planning interview 8).

This participant was asked to provide information in a formal manner due to the seriousness of the event yet their input was not required to interpret the meaning of this information that was already preselected. The manner in which it was conducted gave an adversarial feel to the interaction.

They said it wasn't going to be adversarial but it felt adversarial but it might have been partly because I didn't know what to expect. So what made it feel that way? Well it was a panel of people sitting doing your interview, sitting on the other side of the table and me sitting on one side. Someone recording and it just felt like I was being interviewed (Constructing and Planning interview 5).

There is a socially constructed message behind the actions or inactions of the organisational processes. Particular actions are associated with these messages. Removing the notes, or woman's clinical record, from a health practitioner's access implies to them that they are under review without the opportunity to clarify what happened themselves.

If someone delivers in delivery unit, and there's a critical incident, what happens to the notes? They don't go straight to 3M [clinical record], they get put somewhere don't they for someone to put in a RAMP meeting or some meeting and then the next morning and you come on and you go I really want to look at the notes. And I think so and so's got them or that's secretary's trying to book a meeting with so and so... (Constructing and Planning interview 1).

The participant in interview 8 had the following reaction from management that was more explicit:

...excuse my language my 'oh shit' this is terrible, this terrible things happened and how can we make it not happen again and who was at fault (Constructing and Planning interview 8).

Following an incident of violence a health professional was questioned about why she had not called a code earlier. There was the implication that an earlier code could have prevented the situation from occurring. This response was prior to the health professional being given the opportunity to explain what had happened and offer any ideas of her own on how it may have been prevented. The health practitioner perceived that it was considered her own fault she was hit. The response of management in this situation has affected her trust in how future incidents will be managed.

But that's certainly what I remember them saying, well why didn't you call a code earlier. There was no, 'I'm sorry it happened' sort of thing (Constructing and Planning interview 2).

For the participant in interview 8 the response from the organisational leaders indicated a lack of understanding for the complexity of the situation involved. It was expected that the individual(s) were to blame. It felt that there was minimal concern for the emotional wellbeing for those involved:

there's not a lot of kind of, what must that have been like for the people involved (Constructing and Planning interview 8).

The participants interviewed were not provided with information on the next steps following an incident. They expected that a formal review would occur for the serious critical incidents that they were involved in but knew little about how that would occur. The lack of knowledge increased the anxiety. The initial reaction from management can be focused on the risk to the organisation while the concern for the health professional is not outwardly acknowledged. For those who were involved in a formal review the manner in which it was undertaken did not facilitate sharing of knowledge between the reviewer and health professional about what happened in a way that incorporated the context of the health care environment. Although they were the 'experts' on what happened they were not included in the interpretation of the gathered information. Despite the seriousness and urgency with which the review was undertaken there seemed less importance on informing the health professionals involved what the findings were and what potentially needed to change. One participant had yet to receive

the final report with findings and recommendations two years after the event. Without feedback there was a reduced ability to bring about the change and closure to the incident. The absence of information about review processes and formal feedback led to assumptions by health professionals that they somehow deserved such treatment. Such beliefs affected the construction of the meaning of the situation that may or may not have been true. The action group shared similar stories, including those in combined management roles and who potentially were the faces of the organisational response.

Alongside the management / staff relationship it appeared health professionals acted around each other in a way they think is expected rather than what they would prefer to receive themselves. The concerns are familiar to each but rarely shared. The decision to do this appears to be because it is expected of them and the best way to function in this setting is to appear and react the same as your colleagues to avoid judgement. Health professionals have developed a practical knowing how to 'be or act' following a critical incident. It is taken for granted that this is the way to act (Coghlan, 2016). The messages from colleagues and response of the organisation are stronger than the policy that there is a no blame systems approach. The theme, *Who can I talk to? – Identifying the Champions* illustrates this through the voices of those who went against the norm.

The sample of eight interviewees could never be claimed to be representative of all health professionals. Stories with similar themes were told but one similarity appeared to potentially set the participants apart from those who did not come forward. Those who told their stories appeared to be 'champions' in the way they were able to openly examine their practice for areas to improve and support other health professionals. The following participants explained how they were different to their colleagues.

And since then there's a whole group of us because I'm never afraid to say I don't know what the hell was going on but call up everybody, they're all interested, you know what I found, the minute you own up and say I don't know, twenty other people come and say can you show me as well. If nobody else owns up man and then I feel like, why does everybody else know but I don't (Constructing and Planning interview 7).

...people quite often look quite surprised when I'm prepared to say, well these are the bad things that have happened to me and this is what I was going to do about them, including resign. And actually everyone's had something but if no-one tells you about it (Constructing and Planning interview 5).

...and afterwards I like went through it with her and I said you know this is a scary thing, you've never been in that situation before and I just made, tried to make her feel a little better about herself because I remember I felt so bad (Constructing and Planning interview 6).

For the participant in interview 6 being able to share how deeply affected she was after being part of a series of stillbirths in one day took some time. It was something that she thought was meant to be private.

I don't know if maybe I'm a private person when it comes to stuff like that. I don't really go around telling people about it, that I just cried last night ... that it affected me as much. I didn't really tell many people until months later when it was ok (Constructing and Planning interview 6).

Once she did others said they had felt the same. There was a testing that went on to find out who the receptive people were to talk to, to find out who might be the champion support. At the organisational level there were actions that health professionals assumed attributed blame. At the interpersonal level there was a learned behaviour that required health professionals to keep critical incidents, emotions and questions private.

6.3.3 Uniqueness of National Women's Health

Practical knowing is unique to the environment in which it is developed. The uniqueness is attended to through enquiring in a cyclic action and reflection process. National Women's Health identified their service as unique and as such a customised project was undertaken to explore how wellbeing could be facilitated in this particular area. The action group were engaged in the process of reflection and action, although I was driving and prompting the steps taken. The participants in the interviews also identified the need for action and reflection in their individual practice. This was captured in the theme, *How Can I Improve? - Reflecting on Practice*.

Some interviewees talked of helping others after a critical incident to work through the reflective process. "...helping learners sit in the contradiction is the heart of the fertile reflective process" (Armstrong & Sherwood, 2012, p. 27).

I think you need to say to them, here is the notes, let's not dwell on them too much now, it's always easy to look in retrospect but you need to think about this case and we need to revisit it in a few days. And then come back in a few days and then you know they'll have thought about it and hopefully they've got some insight and thought about the

case they'll have realised, I should have done that better. And you can say well yes, that's right, probably better if they bring it up themselves than you having to point it out to them (Constructing and Planning interview 1).

The participant in interview 5 stated she had had no formal training but just tried to provide what she would like to have received.

... I find that the juniors come to me quite often to ask if they've made the right decision or whether their decision making was flawed... I try to get them to tell me what the situation was and what it is that they think might be the wrong decision that they've made and then what made them make the decision that they chose and what would, now that they've thought it and been worrying about it what is it that they've been wanting to do differently and what was the different outcome that they were looking for” (Constructing and Planning interview 5).

In both of the situations above the participants allowed the affected practitioner the opportunity to identify what they would do differently. The consequence of not allowing initial identification or hearing their story is illustrated in the following situations. The participant in interview 2 had cared for a woman who had appeared to have convulsions but later heard other people in the medical team, who had not been present, saying it was not a seizure. The situation was not discussed with them but a conclusion made about their assessment skills. Doubting the involved practitioner's knowledge of the situation was a block to effective reflection and led to resentment.

Reflecting on practice was part of each of the participant's stories. The reflection began with the initial “what did I do wrong?” question to the “what could be done better?” The process occurred irrespective of whether there was praise, perceived blame or silence. Reflective practice is described as the “process of exposing contradictions in practice, and it demands nurses [and other health practitioners] confront themselves and the conditions of practice that limit the achievement of ‘good’ work in which one ‘does the right thing’” (Armstrong & Sherwood, 2012, p. 24). It was an automatic process for the participant in interview 3, following a miscarriage or stillbirth, to question her actions or inactions.

You're always looking to see if you've missed something (Constructing and Planning interview 3).

The participant in interview 7 was distressed that she did not know how to use a piece of equipment correctly. She sought out someone who knew and insisted they teach her so she was prepared for next time.

Even when reassurance was provided it did not stop the process of reflecting on what could be improved. A medication that was difficult to obtain during the situation was made more accessible. The desire for such a delay not to occur again led to a hyper vigilance about ensuring the situation did not happen again.

And we do have it now. Every time I go in there I always consciously look to see if it's there (Constructing and Planning interview 6).

Dewey (1922/2002) explains the natural process that follows a disturbing event:

For a moment he doesn't know what hit him, as we say or where he is going. But a new impulse is stirred which becomes the starting point of an investigation, a looking into things, a trying to see them, to find out what is going on (p. 181).

Facilitating this process of self-reflection and allowing self-identification of areas for improvement evoked a positive emotional response from health professionals and led to practice improvement. According to Dewey (1933), "the function of reflection is to transform a situation in which doubt, conflict, or disturbance is experienced into a situation that is clear, coherent, and harmonious" (pp. 100-101). The examples provided by the interviewees demonstrated such a transformation when reflection was facilitated or enabled. A stance of blame or non-validation of the health professional inhibited a state of harmony being achieved. Most participants indicated an ability to identify some aspects of their practice that may have required change.

Although the themes identified in the study were similar to those reported in the literature each participant perceived their situation as unique to them. Each story was slightly different and more than that which can be captured in a theme. As some of the participants approached a new situation they took with them the previous experiences and modified their behaviour on how to act or what to expect after a critical incident.

6.3.4 Aiming for good and even better – value and ethics

The last characteristic of practical knowing involves being explicit about choices in the research to demonstrate how it is value driven and ethical. The decision to research and

improve support following a critical incident was driven by my underlying belief that health professionals are valued and respected. Being emotionally distressed inhibits good care for women and their families. The messages that came through the participants' stories demonstrated an extreme drive to provide the best care possible. Potentially being responsible for a poor outcome caused some to believe that they needed to resign as they were no longer capable of providing good care. The good of previous years of practice did not negate one potential error.

The theme, *Am I Still OK? - Validation of Self as a Competent Health Practitioner*, is attributed to the desperate need to know they are still valued. Health professionals told of their need for validation after a critical incident. The immediate thoughts as a tragedy unfolded were 'What did I do wrong?' This led to questioning their own competence to remain a health practitioner. The participant in interview 1 described the words that had a significant effect on her recovery.

Everyone working together trying to save this woman, which we didn't in the end and I just sat, and just shocked. [Name removed] appeared and gave me a hug and I started crying and then at the point ... [Name removed] came up to me and said I've looked through the notes and you've done nothing wrong. It was actually the most helpful thing. Cause at that point I was convinced I was about to be struck off ... And I've had a couple of other incidents since then. Both things my first thought is, 'I'm going to be struck off (Constructing and Planning interview 1).

The worry that she was responsible for a poor outcome was significant in her thinking after an event for the participant in interview 4. This connection between something unexpected and an error potentially being made was prominent in each of the health professional stories.

Kind of shock and disbelief and also like, just worry about being incompetent and having missed something, that was a major thing (Constructing and Planning interview 4).

Another health profession recalled clearly the words and actions of a senior health professional following another maternal death.

...I felt like he believed in me. That he acknowledged that I hadn't done anything wrong. That made a huge difference (Constructing and Planning interview 4).

In the moments after these maternal deaths health practitioners remembered clearly the actions of those around them even when the events had occurred many years previously. The most helpful action at the time was the managers of the departments telling these practitioners that they had checked the woman's clinical record and that they had done nothing wrong. In this short amount of time since the event each person had made decisions about their ability to practice. Validation of practice assisted in recovery and was remembered as the 'most helpful thing'. It appeared to break the link between the poor outcome and an error which was the default response.

For the participant in interview 5, support after a maternal death was absent. This lack of support was interpreted as meaning she must have been to blame. The default connection was not interrupted so the health professional continued to believe that she must be responsible.

... before the report came out I had thought, oh well, I know what I thought was everyone thought oh it was my fault and that's why everyone was not helping me because it was all going to come out that it was me. Because I hadn't been involved [in a review process] before so I assumed that was what it was going to be ...and so I wrote my resignation letter (Constructing and Planning interview 5).

The system is currently programmed to connect a critical incident with error, a feedback relationship. Health professionals inherently want to provide the best care they can for women and their families which is incongruent with the organisational response, and subsequently leads to feelings of incompetence. Being good involves actions that are considered to add value. Potentially causing harm tarnished the participant's aim to be good. The stories provided examples of what it was like in practice following critical incidents. Some participants demonstrated the value and ethics of their actions by presuming they had caused harm, and made the decision that they needed to resign. Making a mistake (or presuming they had) was considered negligent and the appropriate response was to resign. Consideration of previous competence becomes irrelevant when faced with a poor outcome and potential error. Following a critical incident health professionals are making a decision about what is the right thing to do. This included reflecting on where they could improve and considering resignation. They needed to match their knowing with their doing (Coghlan, 2016). "In the practical mindset, deciding what to do, what is good/bad, right/wrong, what works or does not work etc. is

somewhat haphazard and uneven as the practical mind aims at the practical and is difficult to objectify” (Coghlan, 2016, p. 98).

The action group identified three further themes or areas that needed to be addressed: *1. How should I talk to the woman and her family? 2. A colleague has been involved in an incident. How can I help? 3. I am a manager and one of my team is involved in an incident. What advice and support should I provide?* As many of the group had dual clinical and management roles they identified the need to assist managers in the support they provided, which in turn would meet the needs identified in the previous themes. The response of senior staff immediately after a critical incident influences the second victim’s perception of their ability to continue practicing, a theme similar to that found in Ullström and colleagues’ (2014) study. A study by Scott and her team (2009) described an “inability to move forward when the event was followed by non-supportive, negative departmental ‘grapevine gossip’, which triggered additional memories and intensified the self-doubt and lack of clinical confidence” (p. 328).

Pulling the themes together provides an explanation of the system and the interconnectedness within it that creates the aftermath of critical incidents in National Women’s Health. The next section will expand on how such explanations underpin the planned change.

6.4 Identifying what to change using complexity theory

I begin this section with two questions from Burns (2015) in regard to complexity theory; “What does change look like in the systems within which we want to make changes? And how will any actions that we take play into that highly dynamic system?” (p. 436). The stories, discussion and reflections provided through this first action cycle have uncovered the interconnectedness of the individuals, groups of individuals and the wider service. Complexity theory was outlined in relation to understanding critical incidents in the literature review, in Chapter 2.

Concern about the inadequate support following a critical incident and motivation to improve was widespread across professional groups, years of experience and area of practice for participants within the study. The question is then, why if so many believe the support needed to be better are the health professional’s experiences less than ideal? Through this action research cycle the answer began to emerge. An unsupportive system

was uncovered that can be explained by unconscious rules, assumptions and habits within individuals, who were unaware of the consequence their collective behaviour was having on each other. The insights gained so far into the system are outlined and the changes that could alter the dynamics of that system.

6.4.1 Hidden rules of the system

Each individual was following rules as they interact with each other creating an order that “(i) they do not intend to create it, and (ii) they are unaware of the relation between their individual activity and the outcome which, collectively, they produce” (Paley & Eva, 2011, p. 272). The unsupportive behaviour when things go wrong can be likened to the unintentional phenomenon of birds flying in formation. Each individual bird is abiding by what they understand to be their own rules to meet their own needs, without intent to create any specific environment. There are many covert rules in the system that governs behaviour after a critical incident. Critical incidents happen but they are not talked about. Fear of making a mistake, being blamed, showing emotion and, admitting to not knowing how to do a task are not spoken about. Individuals provided their stories that showed the same feelings, they were governed by the same rules yet they were unaware that there were any rules in place beyond themselves.

The rules can be likened to what Dewey (1922/2002) calls habits or unconscious learned behaviour. Using another simplistic analogy he describes how a child learns to walk. Initially they learn by watching others and then it becomes an unconscious habit, a socially constructed action.

When a child begins to walk he acutely observes, he intently and intensely experiments. He looks to see what is going to happen and he keeps curious watch on every incident. What others do, the assistance they give, the models they set, operate not as limitations but as encouragements to his own acts, reinforcements of personal perception and endeavour (Dewey, 1922/2002, p. 70).

The health professionals have observed the silence after an event, the stoic moving on to care for the next woman, and the individual blaming following an adverse event. Most in the study found such behaviour hard and made similar assumptions about why they found it hard, such as they were weaker or were more affected than others. As they embedded the rules and associated behaviour the unsupportive environment continued. Each pattern of behaviour that needs to be explained or each *explanandum* has an

explanans, a set of rules (Paley & Eva, 2011). The following *explanandum* and *explanans* have been identified in the system under study.

Individuals are to blame for critical incidents (*explanandum*)

- A critical incident is an indication that I [the health professional] am no longer competent to practice (*explanans*)

Critical incidents are not talked about (*explanandum*)

- I [the health professional] am more worried about contributing to a critical incident than my colleagues (*explanans*)

Showing emotion is a sign of weakness (*explanandum*)

- I [the health professional] am more affected by a critical incident than my colleagues (*explanans*)

6.4.2 Focus for change

A glimpse at the system has identified these rules, and provides a focus for change. A key requirement to alter these rules is for health professionals to be relieved of the burden of isolation, of believing only they are affected. A strategy to facilitate wellbeing needs to be accessible and visible to all, relevant to the specific area of work, provide information about local processes, and acknowledge the desire to improve. An interactive eBook has the potential to achieve this. Education on all the themes that have now become chapter headings in the eBook was proposed with the inclusion of stories capturing and sharing health professionals' real experiences following critical incidents.

6.5 Conclusion

Through the first phase, Constructing and Planning Action, some clarity about how it is for health professionals following a critical incident has been established, a reality that is of concern and provides areas for improvement. Change from a complexity theory perspective encourages understanding of the initial conditions of the system or the contextual situation (Sturmberg, 2016). The interviews and action group discussion have highlighted the feedback loop consisting of poor outcomes, error and blame. The loop continues, resulting in the same outcomes. Occasionally it is interrupted which causes surprise but the system self organises to have the same pattern the next time an

adverse event occurs. The health professional stories show that loop at a personal level but this mirrors the organisational and national responses indicated in the literature review (Calvert & Benn, 2015; Seys et al., 2013; Ullström et al., 2014). At a time when a systems approach to reviewing incidents is promoted more than ever, health professionals are more fearful of being blamed. Meaning has been socially constructed based on health professionals' experiences within the system. Relying on a wise individual to intervene and break the feedback loop was unlikely to be a reliable solution.

What we are trying to do is stimulate change in an environment which is already changing. In other words we have to understand both how things change in the environment within which we work and how things might change as a result of our intervention into that environment (Burns, 2015, p. 436).

However, at this point the effects of the change are unknown. The possible outcomes of the planned action cannot be predicted and we cannot know what other options may become available (Burns, 2015).

Chapter 7. Phase 2: Taking Action - Creating an Interactive eBook

The second phase of the project involved Taking Action. As explained in Chapter 6 (6.2.5), the decision had been made by the action group to create an interactive electronic resource as a tool that through its *development and evaluation could facilitate health professional wellbeing following a critical incident in National Women's Health*. As also identified in Phase 1, this could be achieved by breaking the rules governing behaviours. This chapter will begin by describing what happened during the steps of the cycles undertaken to create the eBook along with my reflections on the premise, content and process of the activities. The second section focuses on the development of knowledge of how an interactive eBook was developed by health professionals for health professionals, for use in practice to provide support following critical incidents. The knowing is framed again with Coghlan's (2016) characteristics of practical knowing. The final section of the chapter outlines how the eBook changes the rules in the complex system after critical incidents. The eBook was identified as a way of taking action that would create change.

7.1 Creating a resource – the story and reflections

The second phase of my adapted General Empirical method of action research was Taking Action. It involved collaboratively implementing the plans made in the previous phase (Coghlan & Brannick, 2014). The existing state in the aftermath of critical incidents has been identified in Phase 1. The analysis of this state from a complexity theory perspective identified rules of behaviour that needed to be modified to allow appropriate support to be provided. The development of an eBook that made the needs of health professionals visible was proposed to begin altering the rules and assist in moving towards the desired state of an environment that supported wellbeing. Therefore the Taking Action phase in this study involved creating an interactive eBook relating to critical incidents as a tool that might facilitate health professional wellbeing.

The development of the draft eBook required seven cycles. Cycle A involved me creating a draft tool. Cycle B – Cycle F involved mini cycles of experiencing, understanding, judging and taking action for specific aspects of the eBook. During this phase a series of one-to-one or small group meetings were held with health

professionals who had expertise in the themes identified in the Constructing and Planning Action phase. When I considered this iterative process of experiencing, understanding and judging in relation to the content to be complete, the tool was made available to all the members of the action group. Together we then worked through the final cycle of this phase (Cycle G). The seven cycles are shown diagrammatically in Figure 9 on the following page. Table 8 in Chapter 5 lists the participants involved in each cycle.

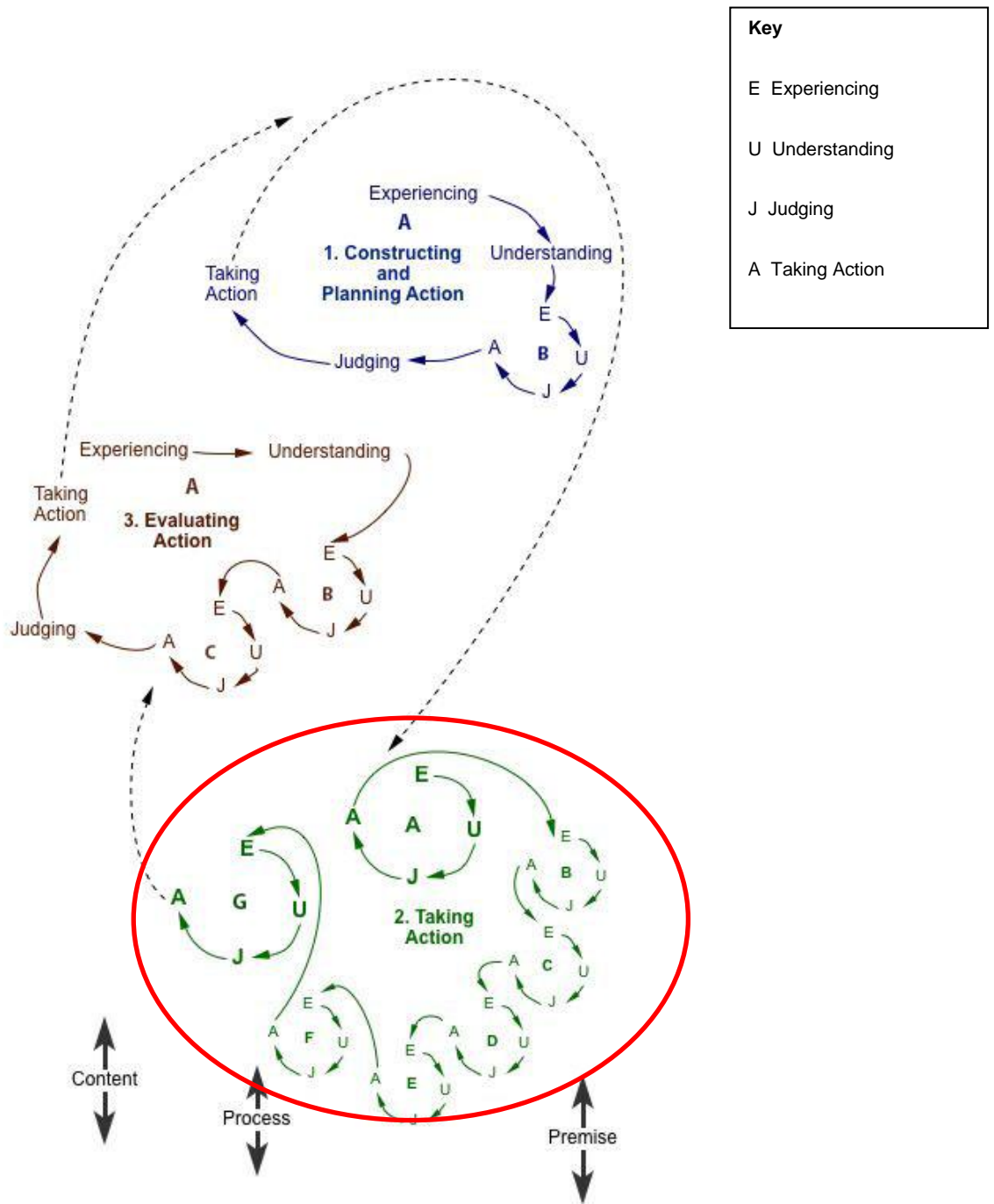


Figure 9. Three phases of the study with Phase 2: Taking Action highlighted

The cycles will now be described in detail. As there were multiple cycles my reflections for the steps have been included after the last cycle.

7.2 Cycle A – making a start on an eBook resource

The themes from the data had been transferred to chapter headings of the eBook and the titles discussed with the action group in Phase 1. At the meeting in the final step of taking action in Phase 1, the group had proposed also using recordings of health professionals telling their experiences of critical incidents and what helped them as stories. Cycle A is how I progressed the tool following the agreed action. I drafted the content of the eBook by working through the steps independent of the action group.

7.2.1 Experiencing – gathering the eBook content

Experiencing involves being attentive to the data. The data included all that had been obtained, and analysed through the understanding and judging steps in the Constructing and Planning Action phase. As the first step in the Taking Action phase I began by drafting content under each of the headings using the literature I had reviewed, local guidelines, knowledge gained from the interviews and discussions, and descriptions of the organisational processes. Alongside, I reviewed tools on websites that had been developed for emotional support. I put myself in the position of the user of the tools and worked through them to experience the concept of gaining support from an electronic resource.

Health professionals, who had indicated they would be willing to share their personal story during previous meetings, were approached to record their stories. Only one of these participants confirmed they would provide a story. I then approached an interview participant from the first stage, who had a story that I felt encapsulated the collated themes. She agreed but it still remained a challenge to find a suitable time to meet and undertake the recording due to the irregular hours worked. At this point only two stories were recorded. I then added my own experience of the first critical incident I was involved in as a nursing student. The recording of stories was a change to the original ethics application therefore an amendment was forwarded to AUT Ethics Committee and approval gained. Anonymity for these participants was not possible and the information and consent form needed to make this clear as outlined in Chapter 5.

In addition to the action group my supervisors provided input throughout the development of the resource. They specifically assisted in negotiating resources from AUT Centre for Learning and Teaching (CfLAT) to place the content into an eBook format. Through the expertise of the CfLAT advisor the development of the eBook went from a two dimensional document to an interactive, professionally designed resource.

7.2.2 Understanding – capturing the key themes

The understanding step involved reading all the information and identifying what captured the key messages from the data gathered and matched the chapter heading. The themes had been identified in Phase 1. I was now asking “What do the stories say about the theme?”, “What do health professionals at ADHB say is important to them?” The literature that explained or verified the local needs was then summarised. Quotes that captured the feelings or thoughts of the participants were put in text boxes to highlight them and make it personal to the service. As I worked through the draft I would write a section, read the analysis of the themes further and then refine the section I had written. Through each reading patterns in the data of what is helpful to support health professionals became clearer. Some topics seemed easier than others and understanding came more quickly.

During the rereading of the interview transcripts, analysed themes and the proposed chapter topics I realised the most obvious area had not been included: what was a critical incident and what are the common responses of health professionals? This was added as the first chapter. The focus had been on what is helpful in the aftermath of a critical incident while the reactions expressed through each story had been overlooked. Time and my reflections led to this realisation.

While reviewing my writing in the eBook with my supervisors it was decided to frame the chapter topics and write in the first person to better capture what the health professional may need and feel at the time of a critical incident. The theme *How can I improve? - Reflecting on practice* was reworded to *I am worried I did something wrong*. The description of a critical incident and the effects on an individual was changed to, *I feel really upset after what happened. Everyone else seems to be coping better*. The action group later endorsed the statements because they resonated with them personally.

I had listened to many stories from health professionals and extensively read the literature around the topic however as I reviewed the data I realised I was including material that resonated with my interpretation of the topic. There was a need to evaluate how I was judging what was considered to be relevant.

7.2.3 Judging – deciding what was important

Understanding, in the previous step develops insight but Coghlan and Brannick (2014, p. 24) state that insights, “are not always accurate or true. The question then is: ‘Does the insight fit the evidence?’” My own needs in reviewing the data were potentially governing what I understood to be important information under each of the topics. This created an unease which stimulated a search for experts in the specific topic areas and more guidance from the action group members. I had created a draft but was aware that I was making a “provisional judgement” which would need to be corrected later, “when you have more or other evidence” (Coghlan & Brannick, 2014, p. 24).

7.2.4 Taking action – refining of content needed

The decision was made by the action group and me to continue with further mini cycles and refine what had already been developed. For each topic heading one or more experts were contacted and asked to contribute to the content and provide critique. The experts were selected by asking members of the action group for their recommendations or from my own organisational knowledge.

7.3 Mini Cycles B, C, D, E, F – iterative cycles with experts

Each of these cycles built on what was developed in Cycle A. Coghlan and Brannick (2014) describe this as subsuming, which means that, “the core activity is maintained and taken further in the next question or step” (p. 25); the core of these cycles being, ‘taking action’ in the form of creating an eBook. The participants for this section included two Clinical Directors (Cycle B), Psychologist (Cycle C), Occupational Health (Cycle D), Human Resources, Clinical Director, Nursing, and Business Intelligence (Cycle E) and Māori Midwifery Advisor (Cycle F). Each had been practising in their speciality area for at least 20 years. Three of these participants were also members of the action group. For these cycles the description of the steps has been amalgamated and presented in the next sections.

7.3.1 Experiencing – connecting with the experts

At the beginning of each meeting the action research methodology was explained to the participants as a reminder. A review of the cycles undertaken to reach the current stage was provided. Although the participants were also part of the action group they had not all been able to attend each meeting and the update on progress ensured they were aware of what had gone before. As the overview was provided it gave the participants the opportunity to suggest possible gaps in the previous action cycles. For example one participant asked if the input of occupational health had been included in Phase 1 to ensure that a similar tool had not already been developed in another area of the organisation. It had not. The ongoing checking and questioning of the participants throughout the cycles strengthened the validity of the process.

Each of the respective experts was provided with a printed copy of the full draft and shown the resource online. They were encouraged to read it in its entirety but were also directed to the section relevant to their expertise. For example the psychologist revised the content for the section *I need to talk to someone. What are my options?* as they had expertise on providing guidance about who to contact and when professional help was required. These meetings and revisions occurred over a four month period.

7.3.2 Understanding – experts review the content

Identified changes were made to the draft eBook and then reviewed by the same expert or a member of the action group for accuracy or verification. This occurred multiple times as I worked through the complete book. To gather input on the draft, meetings were scheduled and specific sections that were most relevant to that person presented for discussion. An example from my journal demonstrates this:

I had also organised to meet with one of the participants of Phase 1. I showed her what had been put together and she was impressed and acknowledged the amount of work to pull it together. I directed her to the section that I knew she was keen that we make clear. She wanted the senior clinicians on the day to know what to do and how to follow up staff. That was not included properly, I had the manager and the health professional, the layer in between was missing (personal journal).

Following the recognition of this gap a new chapter or content section was developed and titled, *I am the most senior person on duty. How can I help my team members?*

Further examples of changes included areas such as; *How do I know I need to talk to someone?* which required specialist input from a psychologist, referencing to local policies, and potential resources or people to contact.

Participants also asked questions of the themes that had been established in Phase 1. For example a participant was surprised about the need for time out from clinical practice after a critical incident and wondered whether it was required for a particular professional group. That the need had been identified across all groups was explained which provided both clarification and learning for that participant in their management role.

7.3.3 Judging – experts decide what is important

There came a point when the content was considered accurate and complete by me and the participants in these cycles. Choices were made about the level of content and options to include. As stated by Coghlan and Brannick (2014) when a decision is made that a particular option is best we need to “realize that all things valuable are valued through responsible consciousness, and that true values are learned by people being responsible – thus our emphasis on the activities of knowing” (p. 27). Our judging and subsequent decision making is limited by the ability to be responsible, an ability that is only refined by taking the opportunities to be responsible. Repeated cycles of action and reflection, based on attempts to be responsible leads to knowing in practice.

7.3.4 Taking action – bringing the content alive as an eBook

The draft content was provided to the technical expert at CfLAT to transfer into the eBook template. The three recorded stories were embedded as were links to additional resource material already available such as on the Ministry of Health website. A meeting was organised with the action group to present the online resource.

Participants in Cycles B – F were part of the decision to take action and discussion evolved around how this could happen. They were interested in my ideas and those of the wider action group and also wanted to provide suggestions to be taken into the next phase. One participant asked:

*The question I have is that because it [critical incident] is self-defined, how does it get triggered? How does the process get triggered?
(Participant Cycle E).*

Another participant at the meeting responded that there should be certain things that trigger an organisation wide response but they would not be exclusive:

If you see someone that is distressed you pick up on that and you offer. And someone should feel free to self initiate if they need to. Hopefully if all of this is transparent and people know that it is there... (Participant Cycle E).

This participant then went on to speak of the balance that is required in providing support:

You don't want to push stuff on people that they don't want or have needs that are not met because they are too afraid to say anything (Participant Cycle E).

The concerns of health professionals to be safe in accessing support that were revealed in Phase 1 and reiterated to the participants in this phase had informed the suggestions now being made about potential utilisation of the resource. Following the input into the resource it was now important to participants that it become visible for health professionals. The ideas, concerns and thoughts were taken forward to the next phase, Phase 3, Evaluating Action.

7.4 Cycle G – bringing it together with the action group

The last cycle involved reviewing what had been created and reflecting on how the action had been undertaken, making a decision to evaluate the eBook and gaining approval from the management of the service to undertake the evaluation. The steps are explained in more detail below. As the final cycle in this phase it brings together and builds on what has been completed in the previous cycles. The reflections included under each step here therefore encompass this cycle and the reflecting in the cycles before.

7.4.1 Experiencing – collaborative gaze at the eBook

The step of experiencing in the final cycle of this phase involved the action group in reviewing the eBook content and meeting together to be attentive to what had been created collaboratively. The mini cycles were completed and the action group was convened to discuss the progress to date. Along with the action group all participants in the first phase were also invited to be part of reviewing the resource. The eBook was

presented via a link and paper copies made available. Participants had had the opportunity to focus on the content through the previous cycles; however all were advised that further input was encouraged.

Participants, who had provided their stories during the interviews, had done so anonymously and therefore may have chosen not to attend for that reason. A total of eight people attended. Each of the professional groups was represented. The majority, but not all, held management type roles alongside their clinical roles.

Reflection - Experiencing and how the draft evolved

My previous personal experience and skills determined how the draft was moulded as the facilitator of the research. I clearly influenced the gathering of information or data. I had been guided by the health professionals' stories and the action group members but initially how I put together the resource to meet the identified needs was done through my own lens. My technical computer skills enabled me to draft a product that was considered impressive by the participants. I would have liked to have had the participants design their own chapters however this was not realistic due to their time restraints and the depth with which I knew the topic. Whilst using their skill and expertise I continued to be the director, but having the control to cut and replay (Coghlan & Brannick, 2014). Time and availability limited the input of participants, even when they were enthusiastic. Below is a note in my personal journal,

At the end of the day I took a printed copy of the resource to one of the midwives who had been in the Phase 1. She had expressed an interest in reading all the package. When I gave it to her she was keen to read it and mentioned a recent event where it could have been useful (personal journal).

I followed up with an email to ask how she was progressing with reviewing the content and later called in to see her. She returned the printed copy to me, having only glanced at the first page. Despite her expressed commitment the everyday immediate demands of her job prevented her best intentions from being enacted.

7.4.2 Understanding – collaboratively considering the value of the eBook

Together the action group were inquiring and questioning the value of the eBook and whether it would meet the needs of the intended participants. We were also considering

how and when it would be most appropriate for health professionals to use the eBook. The following are examples of the questioning within the group.

We are talking about psychological support mainly?

You are not going to have someone who is distressed straight after an event and send them off with the eBook to look at I would have thought?

You need someone who has had an incident and uses the tool to be able to say whether it worked or not.

But it would need to be sufficiently in the past that it wouldn't be traumatic for them?

Maybe you need to get the tool validated first.

The participants of the action group were being responsible in understanding how the tool could work and identifying possible areas where harm may occur. There was agreement that it needed to be tested and that it may not be appropriate in all situations.

Reflection – who was included in the ‘understanding’?

I was continually questioning whether I had expanded the discussion with experts widely enough, were they the most relevant experts and had they provided the depth of review required? I wanted to know that the ‘understanding’ within the mini cycles was happening with the most appropriate people.

Data gathering required attentiveness to who had provided the information and how it was obtained to maximise the effectiveness of the gathering process. Although I obtained input into each chapter of the resource I was concerned that few people had read it in its entirety. I took this concern to the next action group meeting.

When completing the section on supporting a colleague I was using the suggestions drawn from the participants. It led me to reflect on the responses I had previously used when listening to colleagues. I too could have done better. This was the beginning of a deep realisation that I was learning from the tool. It also began triggering feelings of guilt that I had not contributed as much as I could have to a supportive environment in my roles at ADHB.

7.4.3 Judging – eBook considered of value by the action group

As the discussion developed I became aware that most of the action group spoke from the perspective of what they felt others needed in relation to support after a critical incident. This was possibly due to the roles they held in managing teams but also that it was safer to talk about the needs of others in a group situation than their own personal needs. Unless the team members were able to relate to the tool personally the shared understanding of its potential usefulness was going to be significantly reduced. However, I also needed to acknowledge that the participants were not exempt from the socially constrained environment and rules of the complex system that affected the interviewees in Phase 1. I asked the following questions of participants who had been involved in the process from the beginning or had an opportunity to look at the tool at some point:

Has there been any effect on you? or Has discussing the topic increased your awareness in your thinking through this [action research] process? (Action group meeting – researcher)

I realised afterwards that this was a closed question and could have been posed in a more open manner with more preparation provided to the group. However, a manager shared her experience of the resource, firstly from the perspective of its benefit for others as most did and then from her own learning:

Yes you know I just think it is really powerful to have this kind of content available at the click of a button. And lots of people know it's there. What I liked about it particularly...people realise they are not the only one and these kinds of experiences happen to many people. Many people have felt like they do and come through it. And that makes it easier for people to go and talk about how they feel to somebody, whoever that is. So I see it as great kind of wellness enabling resource, and we are looking for ways to do that (Action group participant).

She went on to share the change it had made in her personal practice as a manager:

And when I first joined the organisation there was an incident and I was part of some of the process around that. You know looking back on that it would have been really quite different if I had known some of the things that were in here and so I think it is really useful awareness for HR function (Action group participant).

This comment indicates that through involvement in the project, learning had occurred that resulted in change in practice.

The action group needed to decide whether we had a resource that was now reasonable to release to a wider group of potential users as part of the Evaluating Action phase. As a group we believed the evidence from our reflection on the content indicated that the resource was likely to be beneficial to others. Consultation with experts had occurred, the content appeared to be relevant to the needs of others and there was some evidence of personal change happening within action group members' individual practice. It was agreed that an Evaluation of Action phase was appropriate.

Figure 10 shows a preliminary draft that I developed and Figure 11 shows the equivalent page at the end of the cycles in this phase. Through the iterative, collaborative cycles a very different outcome or eBook had been constructed.

People you can talk to

"...I felt like he believed in me. That he acknowledged that I hadn't done anything wrong. That made a huge difference" (Women's Health Professional)

You may be wondering if there is anyone you can talk to. Talking to a family member or just keeping quiet often feels like the safest thing to do. This is the case in many healthcare organisations. ADHB Women's Health service is trying to improve the support provided to the health professionals working here.

Talking about an incident can help clarify for you what happened, provide you with emotional support and reassurance and when you are ready an opportunity to reflect on what you could improve. Needing to talk is not a sign of weakness or something new to the 21st Century. Rather the way we work has changed. If you talk to anyone who has been around a while they will tell you stories of chatting in the tearoom, telling stories while knitting on a quiet night. Economic restraints and higher acuity means most people are running from one situation to the next most of the time.

How do I know I need to talk to someone?

Just wanting to is a good enough reason.

You may also;

- Need some emotional support
- Be worried about the care you provided
- Want to reflect on how your practice could improve
- Find out if others have had similar experiences

"Sharing with non-judgemental colleagues was reported to ease the emotional burden..." (Ullstrom, 2014, p. 329).

If you have any of the following you should seek professional help.

- Thinking about the incident each day for weeks following the event and criticising yourself for things you may have done
- Negative feelings distressful emotions about the event stay the same or increase of intensity.
- There is a need to continue using sleeping medications, and/or using other drugs and alcohol to feel better
- Continuing to lack confidence in an area of work where you previously felt comfortable
- Continuing difficulty to sleep well due to intrusive thoughts that you do not feel in control of, nightmares or flashbacks. These could be emotional, thoughts, visual, verbal or smell)
- Ongoing change in concentration or attention such as having to re-read clinical material several times, or not being able to concentrate on a T.V. program or book at home
- Other signs that indicate you may have increased Central Nervous System functioning, anxiety, panic, reactivity to a colleagues questions or work situations, feeling less in control of your emotions over-all
- Developing ways to avoid the things that remind you of the trauma
- Feeling emotionally flat or down (for several weeks) and withdrawing from others.

Not everyone is a good listener. You will already know that. Just because a person is in a leadership or senior position does not mean that they will be the best person for you to talk to. There are colleagues around you though who want to be supportive and listen to your story and support you move forward. They are not always the people you expect. Some ideas for finding that person;

Test out colleagues with a safe story to see how they respond

Ask your manager who they recommend.

Look outside your own professional group

After hours consider the Clinical Midwife Advisor, On call consultant or Duty Manager

Once you have shared your story be that person who is willing to support others, make yourself known

Sometimes the best person to contact is external to the service or healthcare organisation. [Here](#) are some options for you to consider.

Figure 10. Chapter content at beginning of cycle



PEOPLE YOU CAN TALK TO

You may feel comfortable talking with a colleague, senior clinical person or manager. However, often you may want someone external to the incident or your service. There are other people you can talk with.



*'It's normal to be rocked by something like this'
(Women's Health professional)*

You may be wondering if there is anyone you can talk to. Keeping quiet often feels like the safest thing to do. This is the case in many healthcare organisations. ADHB Women's Health service is trying to improve the support provided to the health professionals working here.

Talking about an incident can help clarify for you what happened, provide you with emotional support and reassurance and when you are ready an opportunity to reflect on what you could improve. Needing

to talk is not a sign of weakness or something new to the 21st Century. Rather the way we work has changed. If you talk to anyone who has been around a while they will tell you stories of chatting in the tearoom, telling stories while knitting on a quiet night. Economic restraints and higher acuity means most people are running from one situation to the next most of the time.

*'Sharing with non-judgemental colleagues was reported to ease the emotional burden...'
(Ullstrom, 2014, p. 329).*

How do I know I need to talk to someone?

Just wanting to is a good enough reason.

You may also

- ▶ Need some emotional support
- ▶ Be worried about the care you provided
- ▶ How you want to reflect on how you could improve
- ▶ Find out if others have had similar experiences

If you have any of the following you should seek professional help.

- ▶ Thinking about the incident each day for weeks following the event and criticising yourself for things you may have done
- ▶ Negative feelings and distressful emotions about the event stay the same or increase in intensity
- ▶ There is a need to continue using sleeping medications, and/or using other drugs and alcohol to feel better
- ▶ Continuing to lack confidence in an area of work where you previously felt comfortable
- ▶ Continuing difficulty to sleep due to intrusive thoughts, nightmares or flashback*Continue*

Figure 11. Equivalent chapter content at end of cycle

Reflection – how did the judging occur?

At this point I remained concerned that some members of the group had not read the full resource. My perception was that participants were positive about the eBook due to the visual appeal and the general concept of improving support. Time constraints potentially prevented them from evaluating the full resource and the assumption was that someone else would have read it in its entirety. As one participant explained, just the existence of the resource indicated the significance of experiencing a critical incident which in itself was helpful. However, part of my analysis was underpinned by a doubt that the eBook would be valued in practice. This doubt came from my view of the world through a pragmatic lens where all actions must lead to change.

7.4.4 Taking Action – moving forward to evaluation of the eBook in practice

Evaluation of action research can occur in regard to the process such as its participatory nature or the intended effectiveness of the intervention (Froggatt & Hockley, 2011). The

focus for this project was the evaluation of the usefulness of the eBook for potential users. In anticipation of the action group meeting in Cycle G I had reviewed the action research and general literature for evaluation methods. A survey had been suggested by participants in several of the discussions. I reviewed surveys utilised in other studies relating to critical incidents such as the Safety Attitudes Survey (Sexton et al., 2006). For surveys such as these a pre implementation survey would have been required. There are also likely to be other variables apart for the eBook that would affect the results.

A survey was suggested by a participant in the group to evaluate the effectiveness of the tool in improving support however it was agreed that it was unlikely that a cause and effect could be established. As one participant stated:

Isn't the evaluation 'how did you experience the tool' as opposed to do we still have the same problem [unsupportive environment] that we had before? (Action group participant).

Another participant expanded further:

The way of thinking about using this tool would be as an activity that the more we engage with it as a service when it is needed, the greater its potential to have an impact. And you can't say it has a direct [cause] but it has the potential to. So measuring the activity, measuring the use of the tool, the effectiveness of the tool from a user's perspective is a good activity measure (Action group participant).

As it was not clear what evaluation method would accurately reflect the effect of the eBook I contacted an expert at Auckland University of Technology (AUT). After explaining the project the AUT expert had suggested the Think-Aloud technique to gather information on usability of the resource. Articles on the technique were examined and I agreed it was a viable option and was able to provide an overview to the action research group (Ericsson & Simon, 1993; Lundgrén-Laine & Salanterä, 2010). The participant would be asked to speak out loud about the ease of use and the value of the content included within each section of the eBook. This may occur both immediately and after a time of reflection on what the content means to them. My prior preparation of a potential evaluation methodology presented another point of unease. There was a conflict between being prepared and prompting the collaborative process.

In discussion with the action group we considered whether there could be potential harm for staff who were provided with the tool as part of the Evaluating Action phase. Additional support would need to be available if issues arose while working through the book. The main concern was that using the tool immediately after a critical incident could be traumatic. It was decided that it would not be provided immediately following a critical incident even though ultimately it may be used this way. For the evaluation health professionals would be invited to review the resource if they had experienced an incident within the last two years.

It would need to be sufficiently in the past that it wouldn't be traumatic for them. But not so far in the past that they can't remember it (Action group participant).

I presented the evaluation plan and progress to date to the senior management team for National Women's Health and they provided strong support to proceed. The evaluation plan was also forwarded to AUT Ethics Committee to gain approval for an amendment to the ethics application. The AUT Ethics Committee would also be judging whether our processes would be safe for the participants. The amendment was approved in December 2015 (Appendix A).

Reflection – a chauffeurforaction

During this stage I found myself again in the actor-director quandary. I wanted to work collaboratively in establishing an evaluation methodology but I came prepared with an option. The discussion was directed by me yet I also asked for their suggestions so we could jointly agree on action. We were not in an equal space to do this. I had spent a significant amount of time talking to experts and reading the literature. However, I also presumed that if I had asked the group to review the literature in a similar manner it would not have happened. The term *chauffeur* fitted the expectation. One of the group members identified the conflict:

So were you going to go through the multiple suggestions? Or do you want us to? (Action group participant).

I had made an assumption about their lack of time without testing it or being creative in disseminating the knowledge. I could have provided more information before the meeting to allow reflection for those who wanted a deeper involvement.

Through the seven cycles of both action and reflection the Critical Incident eBook was developed. Figure 12 shows the 10 chapter headings that formed the content structure presented for evaluation. I had worked collaboratively with the action group and other participants to facilitate the gathering of expert knowledge supporting health professionals in practice. The next section examines the characteristics of this practical knowing.



Figure 12. Final contents page following the Taking Action phase

7.5 Creating a resource relevant to health professionals' practice

In Chapter 5, the Constructing and Planning Action Phase, the action cycle steps provided a practical knowing of how it is in the system in the aftermath of a critical incident. This next phase, Taking Action, was to create the resource. The iterative, cyclic process of gathering content for the eBook has been described in the first section of this chapter. A practical knowing of how a resource can be created to support the wellbeing of health professionals within National Women's Health at ADHB has been established. It is a knowing of how action can be enacted. This knowing will be presented within the characteristics of practical knowing; its relevance to everyday

practice, knowing that is socially derived and constructed, its uniqueness to each situation, and is overall ethical, and driven by good values (Coghlan, 2016).

7.5.1 Local expertise exists on how to address the everyday concern

Phase 1 showed that the need for support following a critical incident is a real, everyday issue from my perspective, those of the individual participants, collectively as an action group, and for the organisation. The desired actions after a critical incident in National Women's Health were similar among the participants, however they were not the actions that were received. During Phase 2 it became apparent that the knowledge of how to provide the specific aspects of support that health professionals expected was already present within National Women's Health. The expertise to create a support package was internal but it needed to be brought into one location and made accessible to all. The experts had experienced, been part of or led what was considered both good and bad support. Debriefing appeared to be an activity that highlighted the attributes of support. In Phase 1 the participants shared experiences of debriefing:

I think that we need to also develop a culture of knowing how to debrief because historically I think there is this fear that the debrief is where everyone is going to go 'Why didn't you...?' (agreement from others) and attack (Participant group discussion, Phase 1, Cycle B).

Another participant at the same meeting described an event where the health professional was reluctant to attend a debriefing:

We literally had to persuade her to come because she really thought she was going to be criticised and pulled apart and that was really quite awful. But of course as soon as she got here she realised it was a very supportive environment and it was fine (Participant group discussion, Phase 1, Cycle B).

In one of the action group meetings in Phase 2 a member described the characteristics of a person who had undertaken a debriefing following a critical incident. The participant spoke of how this leader had spontaneously gathered people around who were upset. This was in contrast to being told by a manager to lead a debriefing. As the story was told another member knew exactly who that was from the positive description. What is helpful is knowledge that is gained and validated through practice. The four ways of knowing was presented in Section 4.1 may be seen as a pyramid. Experiential knowing underpins presentational, presentational underpins propositional with practical the

assimilation of all three. In this example the participants had experienced debriefing with this person and heard the stories of others. They combined experience with their knowledge of the facts as written in the local policies, engaged with the facilitators as the presenters of the debriefing; all of which is combined to create the practical knowing these participants now put forward as good debriefing. The Taking Action phase was capturing the knowing from practice that already existed within the organisation and gathering it into one location.

It is through this assimilation that the experts were able to speak of how to do “appropriate things skilfully and competently” (Coghlan & Brannick, 2014, p. 44). As stated by Heron (1996, p. 166) “practice consummates the multiple knowings that articulate a subjective-objective reality. On the other hand the practice is validated by its grounding in the other modes of knowing.”

The knowledge that the individuals contributed came from years of working in their field. They had learnt what worked best in practice. They had formal professional training but as Dewey (1929) states in relation to experimental knowledge often taught in formal education, “the object of knowledge is eventual; that is it is an outcome of directed experimental operations, instead of something in sufficient existence before the act of knowing” (p. 171). Solutions to the everyday type of problems already exist in practice. Participants were able to demonstrate this practical knowing through using stories or examples as they reviewed the content of the eBook. Other participants provided recorded stories that emulated the common emotions, needs and actions expected of others and were willing to have these shared in collegiality.

7.5.2 The ADHB way – knowledge is socially derived and constructed

Participants involved in the action group were articulating what should be within the content of the support resource from their socially derived and constructed perspective (Coghlan & Brannick, 2014). The findings from Phase 1 (Chapter 6) showed that there were actions by the organisation that health professionals interpreted as blame. At the interpersonal level there was a learned behaviour that required health professionals to keep mistakes, emotions and questions private. The tool needed to capture the different beliefs and perspectives whilst challenging the dominant constructs that had been identified and were emotionally damaging to health professionals. There was a conflict between capturing how it is within the organisation at the present moment and the

anticipated desired state. Working collaboratively through cycles of action and reflection was essential to achieve a balance between that which was safe and that which would lead to change. To enable the collaboration to occur there were also organisational and social constraints that the action group was bound by and needed to weigh up between challenging and adhering to for the best outcome. The need for time off from the work place after a critical incident was highlighted as a theme in Phase 1 and is used here as an example to demonstrate the decision making around including specific information. From a management perspective there was concern about the resources required and the need to keep the service functioning. From another perspective a participant in Phase 1 had questioned the advice to take time out as,

*If you send them home it looks like we don't want you anymore
(Participant group discussion, Phase 1, Cycle B).*

Another participant in the same meeting responded:

It is a difficult one isn't it? I think some people are more traumatised than they think so expecting them to go from a case where the baby maybe died into another situation and just care someone in a normal way, in a safe way is too much to expect. That's my opinion, and only my opinion (Participant group discussion, Phase 1, Cycle B).

The action group participants reviewed the range of opinions and agreed that there needed to be a reframing of taking leave that did not link it to the perception that the individual was weak, not wanted or incompetent but rather was seen as an acceptable healthy option in some situations. A social constructivist perspective was used when examining the advice for health professionals to take time away from the work environment. This enabled the group to understand that the suggestion of leave was not always interpreted as supportive. A well intended offer of respite could add to the distress for one person yet be welcomed by another. While it was agreed that the advice remain in the eBook it needed to be presented in a manner that catered for the variations as the meaning of taking leave after a critical incident is socially constructed and varies from person to person. The section in the eBook begins with the statement, "Sometimes taking leave will assist..." (Austin & National Women's Health Auckland District Health Board, 2016a, p. 12) and then provides some evidence from the literature and a quote from a participant.

Other socially constructed differences were captured through talking with practice experts such as the Māori Midwifery Advisor. In my journal, for example I have written the following comment about a meeting:

We talked at length about a recent event where Tikanga [the Māori way of doing] was not upheld and another colleague who was not shown genuine support. ... Often people had received contact from people in the service but it was not the people who they thought should be making that contact (Personal journal 7.10.15).

This type of knowledge can only be gained through being conscious of variation in practice and an individual critiquing what they usually do in practice. A recording was therefore made of the Māori Midwifery Advisor speaking about how to uphold Tikanga (or the Māori way of doing) when communicating with a woman and her family after a critical incident.

The need for validation is important for the recovery of the second victim as shown in Phase 1 (Chapter 6). However, it also must be acknowledged that such a need is symptomatic of a social organisation that is unable to provide opportunity for safe reflective practice. While meeting with one participant to review the content I explained that the plan was to include recorded stories from health professionals who had experienced a critical incident. The comment from my journal below indicates how fear prevails yet peoples' actions can be altered by the speaking out of others.

They weren't sure whether people would want to share their stories and asked whether I thought anyone would. When I said I already had volunteers they started to think about whether they could share a story (Personal journal 10.8.2015).

7.5.3 Capturing the uniqueness of National Women's Health – uniqueness of practice

Inherent in action research are cycles of action and reflection and through this process the uniqueness of National Women's Health was captured. Knowledge of past experiences were built upon, added to and reflected on to create the tool; "Drawing on past experience and previous insights as to what worked and did not work before" (Coghlan, 2016, p. 100). The Gibb's (1988/2013) cycle was included as a tool to improve skills in reflection. It had been identified as an important process even when

support was not available. The reflective nature of action research was parallel to what the health professionals needed for their own healing.

Through this research formal cycles occurred however personal reflection was happening alongside. The expert below had been looking for ways to improve support for health professionals in their own specific role. They reviewed the content and responded with the following;

It is setting people up for wellness, it is not just caring for the immediate...What I really like about this resource is how flexible it is and how accessible it is. People can click on the bits that they want to and that works for them. It is not like they have to go off to some training course. You don't have to schedule anything (Participant, Cycle E).

The choice of an electronic resource captured the uniqueness of the busy world of practice in health care. It was easily accessible but private to allow access to information without needing to test who is safe to talk to. The literature was reviewed to establish what was already known about electronic resources and the provision of support. eTherapy, which requires a mental health practitioner (Sucala et al., 2012) was distinguished from that of the planned tool and excluded from the review. A small study reported positive feedback with the use of an electronic resource developed to provide guidance for staff caring for patients with cancer (Pordes, Ashcroft, & Williams, 2011). There are multiple reports of electronic resources being used for learning. The Cochrane review found that practitioners used electronic information more often when combined with training on how to use the information, however the evidence did not confirm whether electronic resources translate into improved care for patients (Fiander et al., 2015). It was important therefore that the resulting resource be assessed for its ease of use for health professionals and guidance be provided on how to access the information.

7.5.4 Purpose of developing the resource – based on good values

The involvement in the project and eBook indicated the participants cared for their colleagues. They knew it was the right action to take and gave willingly of their time to contribute to the resource. The participants in this phase and the action group valued the needs of their colleagues. The overarching message of the eBook was they were valued. As more information and personal stories were collated into the resource the responsibility to facilitate its distribution became strong for me as the researcher, those

who contributed and the action group. Providing the eBook for health professionals to use in practice was ethical action.

7.6 Making change happen from a complexity perspective

Chapter 6 showed how the unconscious rules that dominated and influenced behaviour in the aftermath of critical incidents provided a focus for change. Altering the rules aimed to relieve the burden of isolation and individual health professionals believing only they were affected. Health professionals were likely to remain unaware of the rules that governed their practice “in the absence of any prompting or special effort” (Paley & Eva, 2011, p. 275). The development of an interactive eBook aimed to provide that prompting. Information on the identified themes was proposed with the inclusion of stories capturing and sharing health professionals’ real experiences based on new rules following critical incidents. The previous sections of this chapter have described the steps within the cycles of Phase 2 (Taking Action) and then analysed how this reflects the characteristics of practical knowing. This section will outline how the eBook was a tool aimed to change the rules that underpinned unsupportive behaviour within National Women’s Health. It examines the journey to the desired state of helpful, supportive actions by continuing to use principles of complexity theory to help explain that change.

7.6.1 Reconstructing the rules in the system

In the Constructing and Planning Action Phase participants shared their stories in confidence. There was a willingness to tell of experiences that were painful and what was supportive in the privacy of the study. Through their openness in the protected environment common themes or patterns in behaviour were established and the following rules identified. The patterns consist of an *explanandum* or behaviour that needs to be explained and an *explanans*, the set of rules to explain the *explanandum*. These rules helped explain the connections and actions in the system.

Individuals are to blame for critical incidents (*explanandum*)

- A critical incident is an indication that I [the health professional] am no longer competent to practice (*explanans*)

Critical incidents are not talked about (*explanandum*)

- I [the health professional] am worried about contributing to a critical incident more than my colleagues (*explanans*)

Showing emotion is a sign of weakness (*explanandum*)

- I [the health professional] am affected by a critical incident more than my colleagues (*explanans*)

The aim of the eBook was to be a prompt for health professionals to make the unconscious rules become conscious and therefore able to be changed. The new rules that the eBook proposed were the following.

Individuals come to work to provide the best care possible (*explanandum*)

- A critical incident is an indication that we [health professional] will work together to identify if and how the system and its members can prevent the critical incident from reoccurring (*explanans*)

Critical incidents are shared (*explanandum*)

- I [the health professional] will contribute to critical incidents and so will my colleagues (*explanans*)

Showing emotion is normal following a critical incident (*explanandum*)

- I [the health professional] am affected by a critical incident and so are my colleagues (*explanans*)

Some examples will be provided of how the book rewrites the rules. Firstly the mere existence of the eBook acknowledges the significant impact following a critical incident. As the participant in one of the action group meeting stated:

I think that if a tool like that was available online and I knew that it was there if I was involved in an incident that would already feel like it was affirming that things happen to lots of people. And it matters enough to support practitioners (Action group meeting).

During this phase participants volunteered to share their emotional responses and needs in the public arena. This act was evidence that change had already happened. Their willingness to have these included in the eBook was a step towards showing that emotion is normal after a critical incident. The stories also captured the health professional's aim to provide the best care possible and when a poor outcome occurred there was always going to be questioning about what may have gone wrong. Being willing to share mistakes and reflect on how to improve was encouraged by the health professionals in the stories they shared. This role-modelling had the potential to continue changing behaviour and embedding new habits.

Change was also occurring through the development of the tool. Participants were developing a heightened awareness of the issue and their capacity to be involved in change. External experts were not required; the experts were being exposed within. The completion and availability of the tool seemed tangible and gave the health professionals with managerial responsibilities hope that an outcome was going to demonstrate concern for the known issue. There were comments that reflected the sentiments of "this would show that we were doing something."

A key aspect of complexity theory is the notion of components in the system being influenced in multiple ways that result in behaviours or outcomes that are not directly proportional to the number or type of interconnections (Cilliers, 1998). New ideas, strategies or inputs into the system such as the eBook that may seem logical to improve may have unexpected and unpredicted consequences. Dekker, Cilliers and Hofmeyr (2011) state, "While any such decision can be quite rational given the local circumstances and goals, knowledge and attention of the decision makers, interactive complexity of the system can take it onto unpredictable pathways to hard-to-foresee system outcomes" (p. 943). An evaluation phase was therefore essential to improve the eBook created and also to provide a glimpse into the possibility that it was unhelpful (Burns, 2015).

7.7 Conclusion

The action cycles taken to create a critical incident eBook have been described and my reflections outlined. Through using the action research methodology, Phase 2 has highlighted the characteristics of knowing when creating a resource about practice. The

health professionals had the knowledge of how to help their colleagues through years of experiencing the everyday event of critical incidents. The study facilitated the sharing of a practical knowing that would otherwise be hidden through the constraints of the current underlying beliefs and patterns of behaviour within the organisation or system. The iterative cycles created a resource that was unique to National Women's Health. The unconscious rules identified in Phase 1 were made conscious and visible. Change had already begun. Acknowledging the unpredictability of complex systems the next phase needed to be that of Evaluating Action. The action group collaboratively made the decision to move to Phase 3.

Chapter 8. Phase 3: Evaluating Action - Evaluation of eBook in Practice

This chapter reports Phase 3, Evaluating Action of the action research study. This phase provides knowing of how a critical incident eBook *could facilitate health professional wellbeing following a critical incident*. The tool developed in Phase 2 had begun to break the unhelpful rules governing behaviour identified in Phase 1. An evaluation of the eBook would provide insight into whether potential users would find the method used to break the rules acceptable and effective. The final step of ‘taking action’ in Phase 2 (Chapter 7) involved the collaborative decision to evaluate the eBook in relation to its usability and content appropriateness. As reported in this Chapter, several cycles were undertaken in the evaluation phase with an initial cycle of formal interviews, with smaller cycles embedded that were used to add, change and refine the content in response to the first evaluation cycle. The second section of this chapter examines the practical knowing gained through the cycle on how the eBook facilitates wellbeing using Coghlan’s (2016) framework. Finally the influence of the eBook for change is examined from a complexity theory perspective.

8.1 Evaluating the resource – the story and reflections

The final phase of the General Empirical method of action research is ‘Evaluating Action’. This section outlines the steps undertaken in the main Cycle A and the smaller embedded cycles, Cycle B and C. It is the story of what happened during the Evaluating Action phase. At the end of each step my reflections have been included. An amendment to the ethics application was forwarded to AUT Ethics Committee and their approval granted to progress this phase (Appendix A). Table 8 in Chapter 5 outlines the people involved in each cycle and Figure 13 on the following page shows the completed cycles.

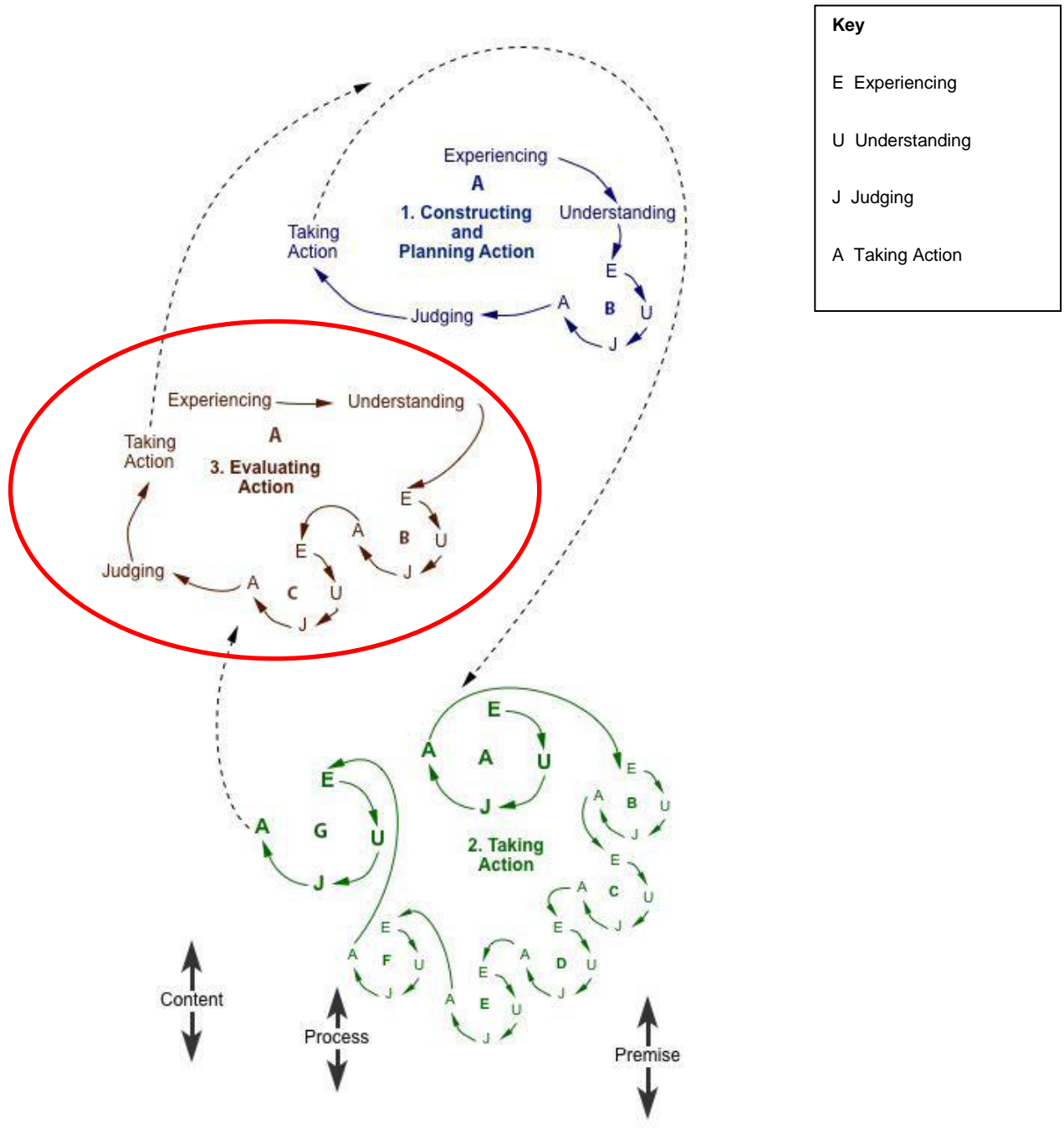


Figure 13. Three phases of the study with Phase 2: Evaluating Action highlighted

8.1.1 Cycle A

Cycle A was the main cycle undertaken and involved the action group, individual participants and myself. This cycle occurred over seven months.

Experiencing – gathering the evaluation data

The main data or experiencing gathered in this step was through formal evaluation interviews that contained rich data on the usability, content revisions and the effect of the tool on the individual. Further data was gathered through a survey at a local New Zealand College of Midwives meeting.

Evaluation interviews

An invitation for participants was circulated via the National Women's Health email distribution list and a further invitation was made during the presentation at the New Zealand College of Midwives meeting. Twelve health professionals, details of whom are outlined in Chapter 5, agreed to take part in the evaluation of the eBook. Two participants preferred to be interviewed together and one was unable to meet so provided the feedback via email. The interviews ranged in duration from 20 to 90 minutes. As agreed with the action group in Phase 2 a formal evaluation method of *thinking aloud* was used to gather the data (Ericsson & Simon, 1993). A meeting time was organised with the participants who agreed to take part. The link to the eBook was then emailed to them approximately one week prior to the meeting. This was to allow enough time to work through the eBook but not so long that the response would be forgotten. The information sheet provided contained the following information about the process.

The chosen method to do this is called 'Thinking Aloud'. This technique requires the participant to use the eBook and talk aloud about what they are thinking. It is a form of usability testing and each session will take approximately 1 – ½ hours. The information will be recorded and notes taken by the researcher. (Information sheet Revised December 2015, Appendix C).

Further discussion was had on the phone and an email follow-up with instructions was sent to the participants who agreed to being interviewed. During the meeting they were asked to verbalise and explain their thoughts or thought processes when they worked through the eBook. The interviews were recorded and then transcribed.

Survey at New Zealand College of Midwives (NZCOM) Auckland regional meeting

I was asked to present my research to date at the NZCOM meeting in February 2016. My supervisors suggested taking the opportunity to gather feedback from the attendees. Members of the action group were informed of this suggestion. A short one page survey was designed and discussed with an AUT Ethics Committee representative in regard to the additional data collection. At the end of the presentation, completed surveys were received from 15 attendees. A summary of the survey results are shown in Table 9 and 10 below. There were also volunteers to participate in the formal evaluations as stated above.

Table 9. Survey participants' thoughts and impressions of eBook as shown in presentation

Questions	Unimpressed	Okay	Good	Very Good	Excellent
Thoughts about idea of resource				4	11
First Impression*			1	5	8

* 1 participant did not provide an answer

Table 10. Survey participants' likelihood that they would use or share the eBook

Questions	Unlikely	Perhaps	Maybe	Probably	Very Keen
Likelihood might use eBook			3	4	8
Likelihood might share eBook with a colleague			1	3	11

4 people indicated that they would share with others more likely than would use themselves

Reflection

The planned method of thinking aloud was difficult to maintain as participants moved quickly from giving impressions and critiques to using more stories from their own practice to confirm or not what was contained in the book. I realised as I reflected further that this was appropriate and understandable as the eBook had captured the stories of others and an important response was to relate to these. From a complexity perspective the additional stories helped me further understand the relationships in the system and the potential effect of the eBook.

The addition of gathering feedback from the attendees at the presentation was interesting but was limited in the contribution it made to the refining of the eBook. I had shown a snapshot of the action research methodology and the resulting resource. The

participants were unable to connect with the content since they could not see the whole eBook, but rather the attendees made judgements on the small amount shown. This resulted in them being more focused on the visual aspects and a debate began on the importance of the images in such a tool. The overall feedback was that the critical incident eBook would be valuable in practice. However, as this was a group situation some voices may have felt inhibited to express their thoughts if they differed from those that dominated.

Understanding – themes and patterns in the data

Themes were identified from the interviews with the participants in this phase using Braun and Clarke's (2006) method of thematic analysis as was explained in Chapter 5 and used in Phase 1 in Chapter 6. Initially the transcripts were printed and different colours used to highlight comments that were similar. These comments or statements were grouped into similar themes. They were then checked back against the original data. The themes and areas for change are presented in this section and examined in more depth in section 8.2. The analysis was initially undertaken by me and then presented to the action group. Examples of stories and comments from the evaluation interviews that supported the themes were provided to the team. Participants had shared many stories about their experiences of critical incidents, stimulated by working through the resource. These did not provide specific feedback but reinforced the themes on which the eBook was based. The content resonated with the participants and the stories were evidence of this.

The feedback was grouped into two broad themes: usability and content critique, and relevance or connection (personal and for colleagues) with the topic. The latter is further divided into subthemes as shown below and discussed in the next section.

1. Usability and content critique
2. Relating resource to personal situations
 - hidden fears and emotions made visible
 - identifying self in the eBook
 - desperate need to have the resource
 - an idealistic state presented
 - timing of accessing the eBook is self-determined
 - keenness to support colleagues

Usability and Content critique

Usability related to ease of navigation around the package and was a key interest of this evaluation process. The ability to work through parts of the package (or chapters) individually was seen as beneficial in relation to time restraints and being able to focus on the area that most related to how the user felt in that moment. The overall impressions were very positive with participants both liking the ease of use and connecting with the content topics. One participant summed it up very positively by saying she was pleasantly surprised when she first opened the resource:

I was pleasantly surprised to find this lovely, very easy to read and well constructed wheel which seemed to include all the different sections that you might want to see and some that I would not have thought (Evaluation interview 10)

The visual impressions created by the photos used in the resource fitted both under content evaluation and connection with the resource. The pictures created the greatest dissension with views on their appropriateness polarised. Comments ranged from “who cares” to a strong request to see themselves visually. More words, fewer pictures and vice versa were both views expressed. For some the pictures were distracting and considered to be American staged photos. Some felt the package should reflect Auckland District Health Board’s (ADHB) environment and include more cultural diversity. This was counteracted with those who felt that if they recognised an individual this could affect their ability to interact with the resource. The comment below contrasted to those who felt it was important to change:

I like the artwork as well. The visual there straight away captured my interest (Evaluation interview 1).

The quotes used in the tool from the initial Phase 1 interviews were labelled generically as being from a “women’s health professional” rather than specifying the group. This had been done deliberately as there had been assumptions made early on that different groups responded differently despite this being contradicted in the interviews and the literature. When the rationale for the title was explained it was requested that this be added in the resource. This explanation was included in the cover page of the eBook, “The stories and quotes are from a range of health professionals; allied health, lead maternity carers, medical, midwifery and nursing...” (Austin & National Women's Health Auckland District Health Board, 2016b, p. 1).

Specific gaps or clarifications were noted and addressed in the revision of the eBook.

They are listed below:

- Increase information on who to contact;
- Add information on how family members can be supportive;
- Move Māori midwife advisor recording to a section that matched the content;
- Correct health professional regulation information;
- Change quote that had been repeated;
- Include copyright information;
- Add poem to end of the eBook as it ended abruptly with references; and
- Edit and check grammar.

Relating resource to personal situations

The analysis of the interviews showed that the participants related personally to the resource. This connection with the tool is represented by the following themes:

- hidden fears and emotions made visible;
- identifying self in the eBook;
- desperate need to have the resource;
- an idealistic state presented;
- timing of accessing the eBook is self-determined; and
- keenness to support colleagues.

The action group was presented with the findings and then clarification was sought about the content. For example in relation to people to contact, the group was surprised that senior health professionals who worked in the service were not using the free Employment Assistance Programme (EAP) that provides counselling and debriefing following a critical incident. They wanted to know whether participants were unaware of the service or chose not to use it. I was able to inform them that senior participants had stated they did not know of the service despite being within ADHB for many years. Members of the action group were able to add understanding to this finding by explaining the history of experiences of EAP not being helpful:

It may be that there have been some instances where EAP hasn't been very helpful and some people have been kind of, you know, not trusting of the process (Action research participant).

These experiences had potentially led to EAP not being promoted despite the fact that the provider had been changed to address this specific issue.

The chapter in the eBook relating to *People you can talk to* led to a discussion on the appropriateness of managers as someone to contact. There was in-depth discussion that evolved around what some considered should happen and the reality of how it is in practice for those in senior roles. Participants had raised concerns that some senior clinicians were appropriate and for others there would be a conflict with disciplinary processes. The blame culture underpinned this concern. The decision was made in the group to add the title “senior health professional” as an option to contact. Training for senior health professionals in the service was seen as an important step and the option of using EAP to provide psychological first aid was considered. As a result of this I organised a quote for the provision of the first aid training and forwarded it to be processed through the appropriate channels within National Women’s Health.

Reflection

The feedback was very positive and this was encouraging for me. In comparison to the first phase where I was listening to stories with little to offer back to the participants I felt there was now something tangible that had been created that acknowledged the impact of critical incidents. At the same time it was hard not to feel defensive or try to justify decisions when there was negative feedback. With more resources available there could have been benefit in having someone independent involved in the evaluation phase. The advantage of my approach however was that when the rationale for some of the decisions was provided a beneficial discussion of the pros and cons was also possible.

Judging – revising the eBook

The list of feedback for content changes from the evaluation interviews as shown in this section was presented to the action group and decisions made about what to implement. All these changes were incorporated into the revision of the eBook content. The themes relating to how the participants connected to the eBook were discussed in depth. The reference to an idealistic state being presented such as debriefing and time out from the work place required a more vigorous conversation. Through a social constructionism perspective, as discussed in Phase 2, the group was able to understand the various interpretations on these strategies that led them to being considered idealistic. A

judgement was made to retain them with the aim to promote an expectation they be considered and framed in way that enabled health professionals to feel safe in choosing what they need.

The action group decided however that further discussions and input was needed to resolve some of the feedback received such as the pathway for self-employed Lead Maternity Carers (LMCs) to contact someone in the organisation after an incident. We were not able to provide answers or resolution from within the group. Further mini cycles (A and B) were embedded before the final step of taking action and are described below. The photos remained an area of divided opinion. The images participants felt most strongly about were changed. After weighing the risks and benefits, photos of local health professionals were not utilised. I made this final decision alone. Health professionals had expressed concern about seeing people connected to the incident when distressed. This was considered by me to be more detrimental than a photo that appeared to be from another facility.

8.1.2 Embedded Cycles B & C – ongoing revisions

B: I had email conversations with further experts in the content areas that had been criticised, such as development of information for family members, details of potential contacts and correct copyright information. Changes were checked back with the experts who had helped develop the various sections at the time.

C: An additional meeting occurred with a representative from each of the disciplines of medicine, midwifery and nursing to work out a pathway for self-employed LMC care providers. The group proposed a contact person whose name was forwarded to management. The leadership team, having an overarching view of the service were able to provide an alternate role that they endorsed to be the contact for self-employed LMCs. The eBook was revised with this information. The final version of the eBook was proof read by several people and republished with the support of the AUT Centre for Learning and Teaching (CfLAT).

Reflection

At this point of the research I realised the impact of my shifting positionality. I had moved from being involved in the internal governance meetings which gave me insight into the discussions and views of leaders in the service to now being required to rely on

others to provide this information. For example the suggestion that a psychological first aid course could be useful for senior health professionals was put forward yet it became very blurry as to whether it had remained on the agenda and why approval had not been granted. I had obtained a quote for the course and forwarded it to the appropriate governance group however during the project timeframe it was not progressed and it was never clear why it was delayed. I found this disappointing as it appeared the course would provide the skills senior staff needed to develop to support their teams.

Insider information continued to influence in other ways. When considering a contact person for the self-employed care providers the group reflected on the personality and work load of possible options and decided on the best fit. We felt we knew what would potentially work best within the constraints of the current situation. Management were able to envisage the wider, more long-term strategic goals and selected the role that should fulfil this activity. On reflection I could understand they were using their management skills to implement what was appropriate going forward whereas in our action group discussions we had focused on a more narrow local understanding. The role advised by the management team was included in the eBook as the contact.

Taking Action – becoming accessible and public

The completed eBook was circulated to the action group and all the participants involved in every stage of the study. At the action group meeting it had been agreed that it would be made easily accessible via the already established National Women's Health website. I liaised with the technical person to upload the eBook and in consultation with action group members refined the wording that would be included to explain the tool on the website. Once loaded it became available for all ADHB staff, self-employed care providers based in the community and any member of the public who wanted to access it. The active link is available here. <http://nationalwomenshealth.adhb.govt.nz/health-professionals/critical-incident-e-book> (Austin & National Women's Health Auckland District Health Board, 2016b).

- Health Professionals**
- Policies & Guidelines
- Information and Referral Forms
- Day Assessment Unit - DAU
- Iron in Pregnancy
- Induction of Labour
- Quality and Safety
- Annual Clinical Report
- Education & Training
- Critical Incident e-book**
- Auckland Regional Cervical Screening Project
- Careers at NWH

Health Professionals » Critical Incident e-book

Critical Incidents - Support and Practical Advice

Critical Incidents ebook is a tool for health professionals and managers to provide information, stories and practical advice when things go wrong.

Click the image below or copy and paste the following link into Google Chrome or Mozilla Firefox for full access to the e-book: <https://indd.adobe.com/view/3d862db3-af27-4197-8bf4-825f46565ad1>

For questions relating specifically to the eBook please contact Diana on daustin@aut.ac.nz



Figure 14. eBook location of website

A summary of the research findings and introduction to the eBook were included in the 2016 National Women’s Annual Clinical Report (Auckland District Health Board, 2016b). This section in the report concludes with an ongoing action agreed to by the organisation, a commitment demonstrated by the inclusion of the following, “the tool will be made available on the National Women’s website in August 2016 and therefore accessible to all staff and LMCs. It will be embedded as part of the services provided as support following a critical incident” (Auckland District Health Board, 2016b, p. 29).

The activities below were undertaken to launch and advertise the availability of the resource.

Distribution / Publicity

Locally:

- Presentation at the National Women's Annual Clinical Report day within ADHB as the official launch of the eBook being publically available;
- Flyer emailed twice to National Women's Health email networks, asking that flyer be put in prominent places;
- Midwifery Educators laminating flyers to promote at the education days that all midwives and nurses must attend;
- Participants of the study were emailed the resource to inform them that it was now available;
- Link to eBook on National Women's Health website emailed to LMCs in the community in the Auckland region;
- Link to eBook on National Women's Health website connected to medical doctors' internal support framework document; and
- Link to eBook on National Women's Health website included in weekly update from Labour & Birthing Suite.

Nationally:

- Presentation at NZ College of Midwives conference;
- Midwifery Council forwarded link to eBook to their contacts following above presentation;
- Link to eBook on National Women's Health website sent to the organisation's Employee Assistance Provider; and
- Health Quality and Safety Commission New Zealand requested that ADHB allow the link to be on their national website <http://www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/2802/>.

Reflection

The action group and I were delighted to have the resource completed and available for launch at the National Women's Annual Clinical Report in 2016. It felt like the concluding point of the three phases. However at the presentation I emphasised that the progress to date was equivalent to a long latent phase of a woman's labour. The term *long latent phase* is commonly used when a woman spends an extended time wondering

if she really is in labour with contractions starting and stopping and progress seeming slow, although the cervix is quietly preparing to dilate. The reason for the analogy was to emphasise that following the long process of developing the resource National Women's Health was now ready for the active stage of labour. The eBook was making the issue public and showed commitment to how health professionals should be supported. The next stage was for National Women's Health to continue the change and enable the expectations laid out to be met.

This first section of Chapter 8 has described the steps in the cycles of Phase 3 and my personal reflection at each step. The final point of the Evaluating Action phase was to make the completed eBook available for health professionals as a tool that can facilitate health professional wellbeing following a critical incident. Through the collaborative and reflective processes an understanding of how such a tool can be helpful was obtained. The practical knowing of how an eBook, developed through an action research project, can facilitate wellbeing will now be examined in detail.

8.2 Impact of the eBook following critical incidents

This section demonstrates how the Evaluating Action phase in the action research study has provided a practical knowing of how an eBook created collaboratively by National Women's Health improves the support available following a critical incident. The thinking aloud data, stories and discussions have shown the impact the eBook can have. The themes from the gathered data are presented within and linked to the framework of the characteristics of practical knowing (Coghlan, 2016).

Everyday concern visible

Hidden fears and emotions made visible

Tool integrated into the reality of the socially constructed organisation

Ideal state now explicit

Keenness to support colleagues

Uniqueness captured through cycles of action and reflection

Identifying self in the eBook

Timing of accessing eBook is self-determined

Collaborative action that is driven by values and is ethical

Desperate need to have the resource

8.2.1 Everyday concern visible: first, second and third person levels

Phase 1 identified the aftermath of critical incidents as an everyday concern. Phase 2 used the internal knowledge in the organisation to develop a resource for health professionals. The third phase evaluated whether the tool accurately captured the everyday concerns in a way that was useful and helpful to health professionals. The theme that dominated was that the everyday concern that was previously hidden was now visible through the eBook.

Hidden fears and emotions made visible

The interviews in the first phase, Constructing and Planning Action identified the fears of health professionals following a critical incident. The concerns of these participants in the Evaluating Action Phase were strikingly similar. While reviewing the draft eBook one participant, who had recently been involved in an incident, related her current feelings and expectation of blame:

I immediately became concerned about my role and was there going to be blame happening...this package has very much highlighted it for me that other people feel the same way. Sometimes I think I am the only one (Evaluation interview).

Later this same participant reinforced how the eBook showed she was not alone in feeling the way she did:

It just absolutely clarified that I'm not the only person that has felt this way. We are just human [pause]. It was really helpful to read that and to understand that I am not the only person in that situation and normalise it I guess (Evaluation interview 1).

The participants' feelings and concerns had been captured accurately through the stories in Phase 1. The fear of blame was kept hidden and the eBook made it visible and was normalising the response amongst health professionals:

I was just interested in collegiality, it's the non judgement bit which I do think you stress well (Evaluation interview 2).

One health professional explained that in their area they have an environment where expressing distress after an event is hidden:

Sometimes new people have a distorted view of what's normal because they're thinking I'm in such a state here and everyone else looks like they're just carrying on like robots (Evaluation interview 5).

A new staff member's reaction can then be to emulate the behaviour, perpetuating the silence and obscuring the need for support. Senior personnel needed to speak up honestly about their experiences of poor outcomes, including how upset they have felt:

It's acknowledging that it doesn't matter what level you're at you know everyone has the same feelings (Evaluation interview 5).

However, this appears to be difficult with the current perceived expectation that individuals should behave in a particular way, such as not showing emotion or sharing their fears, concerns or critical incidents. Senior health professionals spoke of needing support as much as their less experienced colleagues and therefore they could find it hard to support their team members:

I try to look after my team but who looks after me (Evaluation interview 7).

Another participant summarised her thoughts from reading the book:

I felt like three points I really got from it was everyone's going to have a critical incident at some points, that it's normal to be upset about it and there is support for you if you need it... that came out really loud and clear (Evaluation 3).

This participant also felt the opening page that used 'I' statements connected the resource to what they needed personally; it was about their feelings. Alongside the personal connection they could also see the value in sharing the tool with colleagues. During the interview the participant recalled a story of a situation where they would have provided it to a colleague. They believed health professionals both within National Women's Health and outside could relate to the content.

Another perception was that being emotional is a sign of weakness and this was reinforced in the organisation. Examples were used to demonstrate this such as taking a support person to a meeting would be beneficial but could be interpreted as a sign of

weakness (Evaluation interview 3). Since the resource is electronic it could be reviewed in the privacy of the health professional's own space and provide a level of affirmation:

The great thing about it was that I would look at the book but I probably wouldn't have gone to talk to someone ...I would go to the book and get more information and feel affirmed that other people do feel like that too (Evaluation 6).

The eBook potentially provided practitioners with the courage to access the help they needed. Sharing experiences can lead to criticism so can be a motivator for keeping quiet. The audio recorded stories enabled the listener to hear colleagues who were prepared to break the status quo of silence. The tool was having a normalising effect for those who read and listened to it. There was a strong sense of resonance with the stories of others and a valuing of having somewhere safe and helpful to turn. It was considered important to acknowledge that a woman or baby's poor outcome is going to happen to most health professionals during their careers. The important thing was that it not be:

brushed under the carpet as much (Evaluation interview 4).

The addition of the eBook to the current system in the aftermath of critical incidents was changing the current view in the service that silence was the expected response. It was advertising the common responses to critical incidents and endorsing the behaviour that discussing them was acceptable and to be encouraged. From a complexity perspective the introduction of new rules for the members of the system that promoted open communication about experiences of poor outcomes could lead to reorganisation and growth within the system.

8.2.2 Tool integrated into the reality of the socially constructed organisation

Social constructionism provides insight into how the actions in the system have been interpreted. What has happened before is used by health professionals to apply meaning to future events. There is no pre-given, set in stone reality. Rather, the way things are is because of the meanings established within the social world. People know how to respond in a situation because of the "fabric of meanings" in which they are embedded (Berger & Luckmann, 1966, p. 27). In Phase 1 (Chapter 6) particular activities were identified that were perceived as unhelpful because they had a socially constructed

meaning. For example the removal of the clinical notes containing information about a woman's care and placing them in a manager's office after a critical event was interpreted as questioning the health professional's practice. This meaning occurred because in the past individuals whose practice was being reviewed found that the notes of the women they cared for were taken by a manager and these experiences were shared amongst the team. On future occasions when the notes are not available to a specific health professional the interpretation is that they are to be blamed. In the content of the eBook the statement, "Ensure the involved people have access to review the clinical record" (Austin & National Women's Health Auckland District Health Board, 2016b, p. 18) was added to make it clear that expected practice was that the notes remain available to the health professionals involved. Making the expected actions clear was anticipated to remove an opportunity for negative meaning, as well as being sensible for the practitioner to have access to the notes to continue providing care. In one evaluation interview the statement was questioned as currently keeping the notes accessible did not occur. While working together collaboratively the action group had to reflect and make decisions on what statements should be included that represented practice as it is in the organisation and therefore provide accurate information and when detail of the expected practice be included. There was a risk of portraying an idealistic state but also an opportunity to change actions. The underpinning social construction of blame is not changed but an activity that is perceived to portray it is reduced. The managers are likely to be oblivious of this interpretation of their actions by the individuals involved in an event. As Coghlan (2016) states, "the practicality is unquestioned until obvious error or failure forces us to ask questions. What am I to make of it? What must I do now?" (p. 95). Ensuring that the notes remained available was the advice the eBook provided to managers following the understanding of what it meant for those involved.

It was essential that the action group identified the social construction of specific activities in what was included in the eBook and the way it was presented. This section will explore further the two themes; *an ideal state* and *keenness to support colleagues*. They are examined from the perspective of the practical knowing being socially derived and constructed.

Ideal state now explicit

The main concern about the eBook as a whole was that it presented an idealist state that was not currently a reality. Participants were positive about the content and processes the resource outlined but then some went on to say they had not personally experienced such processes. This section will outline some of the areas identified as lacking and how they were resolved towards a common understanding in the service.

When asked whether she thought the content of the eBook was idealistic, one health professional said:

*No I don't think it's idealistic I just don't think it happens here
(Evaluation interview 7).*

The eBook sets what may be perceived as unrealistic standards in dealing with a critical incident. This participant is quick to say “No”. Such standards show what in their opinion should be happening.

Many had stories of negative experiences after a critical incident. Despite feeling this way one participant also believed there had been a change. She felt that the allied health, medical and midwifery leadership were on board with the project and this was evident in the debriefing they had recently been involved in. Rather than the expected punitive response it was supportive:

Actually we had a meeting yesterday, a debrief meeting about the incident I mentioned to you and went just as it should have, according to this [eBook]. And I think that is because some of those people have also been involved with your work (Evaluation interview 1).

It seemed that the process of development of the eBook had also influenced the culture and ways of this organisation. For this participant, a recent incident had been handled “as it should.” They gave credit to the people undertaking the debriefing having been exposed to the thinking of the eBook through their involvement in the project.

Another participant was more specific about the current state and the advice in the book that managers were an option for people to talk to. Their experience had shown that managers had a conflict of interest between disciplinary and supportive processes, thus making them inappropriate as a point of contact (Evaluation interview 2). Another participant stated:

I don't know personally myself if I would feel confident going to my direct manager and saying I'm feeling really upset about this because it's very easy for them to point out well you didn't do this you know (Evaluation interview 3).

She also went on to say:

...your manager might not be the right person to say 'yes you can keep going' (Evaluation 3).

It was acknowledged that the response was likely due to different personalities and it was hard to know in advance what response would be received. The initial testing of who to talk to was viewed as risky and could possibly lead to blame rather than support.

There was also a concern about the dual position of health professionals who had clinical and management roles and were potentially involved in a critical incident and then being the person responsible to support the rest of the team, yet equally needing the support. This issue remained difficult to resolve in the current social arrangement of the service. There was a blurring of responsibilities within the multidisciplinary teams as well as particular personalities naturally having a more understanding approach.

The participants who were self-employed LMCs raised the concern that they had no clear idea of who to contact within the organisation and usually did not have a manager. The suggestion that a manager can provide assistance to an LMC was therefore seen as idealistic and unrealistic for this group. As discussed previously, a contact position was identified and included in the eBook. Self employed care providers did not have the opportunity to test the proposed contact during the evaluation to establish whether it would work in practice.

Enabling staff to have time off was another area that was seen as idealistic. The example was given of many staff being involved in an event and that it is not practical that they all go home:

I can see this is fabulous but it's slightly sort of ivory tower stuff and I'm thinking well how do you make that happen with the resources? (Evaluation interview 5).

This is valid critique, yet the stories that emerged from the data in this study showed that often one person was impacted more specifically than others. The action group agreed that time off was still an option that needed to be considered for some.

Two health professionals mentioned that in their areas there was a sharing together of stories more likely to happen when the event occurred after hours or outside regular work hours. People would eat and talk; something they felt was very important for their team. However, this did not cater for everyone as often incidents that have a poor outcome evolved over an extended period of time and those at the beginning can be left in the dark about how and why the scenario ended the way it did. Meetings that occurred at the end of a scenario and after hours were usually informal with no minutes taken. The content of such discussion was therefore unlikely to be passed on to those who were present at the beginning of the situation:

Other people might feel excluded because they were at the beginning but they weren't there at the end (Evaluation interview 5).

The tool creates expectations that may not be provided by the organisation:

The book ought to be followed by or supported by the management (Evaluation interview 7).

This person is very clear that now the strategies in the eBook are clearly laid down, it is the responsibility of management to follow the guidelines and to support staff towards engaging in a process of supportive resolution. However, management are also working within the constraints of the organisation created around them.

Keeness to support colleagues

A health professional, who also had a managerial role, was particularly drawn to the page on *Being a manager* and then read the whole package. Again she was looking for what was relevant to her in the book. She was able to apply the knowledge to her own practice in relation to supporting staff where an investigation is taking place. She had previously not reflected on the effect it had on the staff involved:

Gosh it never occurred to me about the effect on people when there is an RCA [Root Cause Analysis] (Evaluation interview 5).

As a senior team member she knew what the review process involved but was now aware that others probably did not. She saw afresh the impact being involved in a RCA could have on a person. Her manner of working with them may be different in the future. Another example of learning through the eBook was participants gaining knowledge of the services of the Employee Assistance Programme (EAP), which were not well known until they read the book. Another participant was in the process of supporting a colleague and as she worked through the eBook she was relating it to the colleague's situation and how it would help them (Evaluation interview 10).

From the participants' feedback of the eBook there was a challenging of current practices and the associated socially defined meanings that led them to being interpreted as unhelpful. Participants reported changes that had already occurred and they had experienced such as a supportive debriefing. There was also personal learning as the need to provide information to team members about investigation processes that would hopefully translate to changes in practice. Change, learning and challenging of practice was underway.

8.2.3 Uniqueness captured through cycles of action and reflection

In Phase 2 the action group and I had tried to craft a tool that was unique to National Women's Health. However, the feedback highlighted this had not been fully achieved. The theme, *identifying self in the eBook* examines this aspect. The second theme, *timing is self determined* discusses the uniqueness of individual needs that can be catered for with the eBook.

Identifying self in the eBook

The first connection the participants were able to make with the eBook was via the front page. The centre question, "What do you need at the moment?" was aimed to personalise the material to the health professional's needs at the time; the following comments from participants indicate that the aim was achieved:

...it comes into that first page and where you are at. Okay this is me and I really liked how it was written in the first person like I need this at this time (Evaluation interview 3).

I think this is lovely this opening page and I think that if you're in a crisis you would be reading all of that and be going to the first one

that was the most critical to you in that point of time (Evaluation interview 4).

Another participant, in a management role, spoke of how she read the topics and then went to the section that related to her current situation and then proceeded to read the complete eBook:

I glanced at I and I went to what I was drawn to and then I actually read the whole thing. But what I was interested in was the 'I'm a manager what do I do' section and the 'I'm the most senior person what do I do' section because that is where I am now (Evaluation interview 5).

Finding a section that related to the participants personally was a draw to engage with the resource. Being able to connect to the book or 'see yourself' in it was important and therefore was also noted by some groups when they found it difficult to do so.

The midwives in the study acknowledged that it was beneficial to hear a story from a doctor but also wanted to hear the voice of a midwife. Self-employed midwives wanted to see self-employed midwives and interpreted much of the content as relevant to hospital employed midwives. Allied health staff viewed the photo of a theatre as difficult to relate to. Part of the need to see self was based on the assumptions about how other professionals responded. There had been assumptions made that midwives were affected more than medical staff. Listening to the story from the registrar helped dispel that myth:

because we always feel that they [doctors] don't have terrible experiences or if they do somehow rise above them better than us little measly midwives but actually you know it does touch everybody and we're all humans at the end of the day (Evaluation interview 4).

Showcasing the experience as common across all professional groups seems to be important. People in all disciplines are affected. Knowing that somehow makes a difference. It frees any one discipline from a sense of being weak or inadequate.

A self-employed midwife described her first experience of using the resource:

I found myself searching for myself in there like I wanted [to be] visible, I wanted an LMC midwife or at least somebody I related to as a core midwife (Evaluation interview 6).

The LMC's verdict was that she could not see herself therefore the book did not provide personal reassurance that the messages related to her or that her feelings were as valid. This sentiment was held by other midwives. They expected a midwifery story. More stories were wanted, however it was difficult to find people able to provide these. One self-employed midwife agreed to tell her powerful account of a maternal death, an amazing gift. The insertion of her recorded story into eBook addressed the gap that had been identified.

Timing of accessing eBook is self-determined

In the planning of the Evaluating Action phase there was concern that providing the book immediately after an event could be traumatic. However, some participants did reveal at the time of the interview that they had recently been involved in an incident. They found that having the information the eBook provided early helped reduce the worry that happens immediately afterwards and was not in any way traumatic. There is no set time laid down for when this eBook should be accessed. It is rather available for when the person themselves feels the time is right.

8.2.4 Collaborative action that is driven by values and is ethical

The participants emphasised the necessity of support in practice following a critical incident and the tool was fulfilling a desperate gap. A characteristic of practical knowing gained through action research is that it is “driven by values and is fundamentally an ethical process” (Coghlan, 2016, p. 84). The themes; *desperate need to have the resource*, and *obligation to make the resource available* exemplify the desire to enable something good.

Desperate need

There was strong affirmation about the need for such a resource:

“I feel like it is something that is desperately needed” (Evaluation interview 3).

The hidden nature of the issue has meant that information on accessing help also appears invisible. It was seen as:

Something that could potentially fill up a big hole that we've got here around critical incidents... everyone has stories... (Evaluation interview 3).

When health professionals perceive there are scant resources, a big hole, related to support following a critical incident, it comes with a feeling of not being valued enough for the organisation to invest in their wellbeing. This participant knew that everyone had stories, again affirming the need for something to help. She saw the eBook as having the potential to fill that hole.

A lack of information and little communication was interpreted as intentional and secretive. Without openness people start whispering and creating their own truths about what happened. These are often incorrect and damaging:

At the end of the day people's reputations are being harmed when they don't need to be (Evaluation interview 7).

This comment raises the issue of one's reputation, a nebulous, dynamic notion. Following a critical incident this participant suggests that one imagines one's reputation will suffer. Her thoughts suggest that she sees the potential of the eBook to help its users arrive at a more balanced view of such things.

The revelation of the desperate need created an obligation for me to make the resource available expediently. Completing the cycles in Phase 3 became an ethical responsibility with the final step of 'taking action' that of releasing the eBook for everyday use in practice.

8.3 Change towards a desired state

In Chapter 7 the unconscious rules began to become visible in the creation of the eBook. The aim was to use the tool to rewrite the rules as explained below. The Evaluating Action phase assessed the movement towards the desired state. Through the thinking aloud technique the participants connected their past experiences to the messages in the eBook. The information was often familiar to them but they had considered it only to belong to them. Emotional responses were not considered to be so widespread amongst health professionals.

The intended rewriting of the rules (*explanans*) to change the patterns of behaviour (*explanandum*) in Phase 2 were:

Individuals come to work to provide the best care possible (*explanandum*)

- A critical incident is an indication that we [health professional] will work together to identify if and how the system and its members can prevent the critical incident reoccurring (*explanans*)

Critical incidents are shared (*explanandum*)

- I [the health professional] will contribute to critical incidents and so will my colleagues (*explanans*)

Showing emotion is normal following a critical incident (*explanandum*)

- I [the health professional] am affected by critical incidents and so are my colleagues (*explanans*)

Ideas embedded within complexity theory were used to identify these rules as essential to bringing about change in the system. That is, complexity theory offers a way of understanding behaviour that goes beyond the individual and considers the many interactions, underpinning beliefs and external influences that create the system (Cilliers, 1998). The problem area is connected to the dynamics deeper in the system in non-linear ways, of which the individual is often unaware (Burns, 2014). Change will occur, when the rules that are creating the dynamics and influencing behaviour are altered. These ideas were used to identify the rules above that could lead to different behaviours of individuals in the system. The evaluation therefore aimed to establish whether there had been movement towards these new rules in the participants who were potential users of the eBook.

The first rule relates to a health professional's intentions being acknowledged as good and the desire to improve inherent in their practice. One participant when asked "what was going through your mind?" stated:

Reassurance really that people do make mistakes, that's human. It was affirming that you do the best that you can at the time and absolutely I believe I do that. Sometimes you could have done something a little bit differently but you have done the best that you could at the time (Evaluation interview 1).

Other participants reiterated this message. This new rule had been clearly captured within the eBook. The presence of the eBook in the public arena with the endorsement of management provided an alternative mantra on which to base practice.

Mistakes are often hidden through fear of how colleagues may react. The recording of health professionals communicating their personal practice of sharing poor outcomes enacts the change in the rule. Written advice without action would have perpetuated the old rule. In response to listening to the stories one participant stated:

It's what we all experience but we don't necessarily feel safe probably to talk about it...I think it's really important and especially for the new practitioners coming on board too that they know that that's a normal part of their journey too" (Evaluation interview 1).

The project cannot guarantee safety going forward of health professionals sharing their stories of mistakes but there has been a public demonstration of role modelling that may provide confidence to others.

The showing of emotion after critical incidents is a normal response for all human beings and especially health professional groups. Through fear of seeming weak however this emotion had been kept hidden from colleagues and between professional groups. Midwifery participants expressed surprise when they heard the story from a doctor:

It was quite refreshing; we feel the same as the doctors do. It's not just because you're a midwife that you feel like this, it's because you're a human (Evaluation interview 11).

There are many assumptions made by individuals that collectively affect the support they are able to provide each other. The eBook has collected together those assumptions and exposed their inaccuracies.

8.4 Conclusion

The third and final phase of Evaluating Action involved one cycle with two embedded mini cycles. Through the steps of experiencing, understanding, judging and taking action, a practical knowing of how the development and evaluation of an eBook facilitates health professional wellbeing was produced. From a complexity perspective change had occurred in the creation of the critical incident eBook. No longer was the

experience of critical incidents hidden. No longer can the individuals in the system remain ignorant of what each other needs. The content has started to challenge the socially constructed meaning attributed to known actions in the service. The patterns of behaviour can change with the interruption to the feedback loops created by the resource. Its existence is a change for the system in the aftermath of critical incidents. The full effects on the emergent system will only come to full realisation with time. The final summary chapter will examine in depth the learning and change in practice as a result of the entire action research project.

CONCLUSIONS

Chapter 9. Change and Learning

As both a researcher and a practitioner I embarked on this action research study in an attempt to alleviate an issue I had experienced myself and also witnessed the distress of my colleagues who had been involved in a critical incident. This chapter captures the contribution to knowledge (theory and practice) that this study has made in relation to support for health professionals following a critical incident. The themes from individual interviews and group discussions with participants revealed what was helpful after a critical incident which led to the development of the eBook. The hidden nature of the needs of health professionals has been made visible through the development and evaluation of this resource. There is evidence that through such a tool participants have felt validated in their feelings and gained new knowledge in how to support themselves and each other following a critical incident. In keeping with action research, both theoretical and practical advances in knowledge are considered, or as Reason and Bradbury (2008) explain, the emphasis is on the production of practical knowledge both within the local research context and beyond:

A primary purpose of action research is to produce practical knowledge that is useful to people in the everyday conduct of their lives. A wider purpose of action research is to contribute through this practical knowledge to the increased well-being — economic, political, psychological, spiritual — of human persons and communities, and to a more equitable and sustainable relationship with the wider ecology of the planet of which we are an intrinsic part (p. 4).

The action research process of change and learning was underpinned by two major theoretical frameworks, namely complexity theory and social constructionism. This chapter sets out how the use of these two theories has helped to drive a contribution to practical knowledge. The initial section outlines the change through complexity theory which involved the rewriting of the rules within the system. The subsequent section summarises the contribution of this research study to practical knowing. This section begins by recapping how the silence on an everyday issue was broken through the rules identified using complexity theory. The underpinnings of social constructionism are then demonstrated through outlining the influence of the multiple realities within the

organisation and the uniqueness of health professional needs. The section concludes by showing the effects of an overarching concern of participants for each other in relation to improving the support following a critical incident. Finally the limitations to the study and areas for future research are discussed.

9.1 Change through complexity theory

“Complex systems are examples of a kind of order which is not the result of plans, intentions, goals or values” (Paley, 2010, p. 60). In this study the system is seen in what normally happens in the aftermath of a critical incident; complexity theory provides a way of gaining insight into that system. To help explain systems and identify how change could be enacted the concept of rules was used. In Chapter 2 complexity theory, as an explanation for error causation, was discussed. It was then also applied to the organisational response after an event to understand how the system behaved and what could be changed, as outlined in the findings in Chapters 6, 7 and 8. Each individual was found to have been following rules as they interacted with each other creating an order. The nature of the order as Paley and Eva (2011) say is, “(i) they do not intend to create it, and (ii) they are unaware of the relation between their individual activity and the outcome which, collectively, they produce” (p. 272). A complex system is “not the result of plans, intentions, goals or values” (Paley, 2010, p. 60).

The stories in Chapter 6 revealed the unintentional inactions or silence that presented an environment that appeared unsupportive. It was not the individual health professional’s intention but each behaved in a way they thought was expected and which helped them safely conform to the unwritten rules. In this research change was planned to make visible the common needs of health professionals while continuing to maintain their need for safety. The provision of stories from colleagues, local information and evidence from the literature in the eBook is based on different rules to direct a change in behaviour. The eBook describes ways of supporting each other more effectively. It has created an expectation of support that was not previously being met in this setting. The content has been deemed relevant by the participants in National Women’s Health as it was created collaboratively with its members and had management support. A state of unrest or disruption to the equilibrium has been initiated. As a result the system is readjusting to create a new emergent state, leading to growth in understanding how to support each other in National Women’s Health.

An education strategy of communication, debriefing and improvement processes would have been unlikely to be effective prior to the rewriting of the rules and assumptions by which health professionals work. The literature indicates potential benefits for health professionals engaged in clinical supervision (Calvert & Benn, 2016; Dawson, Phillips, & Leggat, 2013); a benefit that could be enhanced when underpinned by a change in rules. Approaching the problem as if people had deficiencies that needed fixing fails to address the unconscious reality that exists. The complexity theory explanation is that, “what everyone is doing is reasonable in the circumstances, given the mix of policy incentives and custom-and-practice procedures they are complying with” (Paley & Eva, 2011, p. 276). The application of a systems approach to understanding the multi-factorial causes of poor outcomes would also contribute to a context in which the use of the eBook could be more effective (Wallbank & Robertson, 2013). Learning better skills in listening to colleagues, although important, is unlikely to occur or be effective in improving support without each person knowing that it is normal to worry about making mistakes, to be affected by a bad outcome and to question their competency.

The patterns of behaviour and associated rules were rewritten through the study and are summarised in Table 11. The stories and discussions from the participants throughout the three phases clarified the rules. When health professionals interacted with the resource it connected them with others, enabling them to see that their assumptions were in fact held by most people. This realisation was a change for these participants. Through the action research a practical knowing of how the creation of a support package could facilitate health professional wellbeing after a critical incident was realised, the characteristics of which are in the next section.

Table 11. Patterns of behaviour and associated rules through the phases

	Identified in Phase 1	Rewritten through Phase 2 and validated in Phase 3
Pattern of behaviour (<i>explanandum</i>)	Individuals are to blame for critical incidents	Individuals come to work to provide the best care possible
Rule to explain behaviour (<i>explanans</i>)	A critical incident is an indication that I [the health professional] am no longer competent to practice	A critical incident is an indication that we [health professional] will work together to identify if and how the system and its members can prevent the incident reoccurring
Pattern of behaviour (<i>explanandum</i>)	Critical incidents are not talked about	Critical incidents are shared
Rule to explain behaviour (<i>explanans</i>)	I [the health professional] am more worried about causing a critical incident than my colleagues	I [the health professional] will contribute to critical incidents and so will my colleagues
Pattern of behaviour (<i>explanandum</i>)	Showing emotion is a sign of weakness	Showing emotion is normal following a critical incident
Rule to explain behaviour (<i>explanans</i>)	I [the health professional] am more affected by a critical incident than my colleagues	I [the health professional] am affected by critical incidents and so are my colleagues

9.2 Practical knowing

Coghlan's (2016) characteristics of practical knowing provided a framework for the development of knowledge and learning throughout the writing up of this action research study. The goal for Coghlan's publication of the framework was to close the gap in the understanding of the contribution of action research to practical knowing. As action research can have a variety of philosophical underpinnings the "question arises about how we may conceptualise our engagement in addressing the worthwhile, and the practical of the everyday, in a manner that has some quality and rigour, and which may be considered 'scholarly'" (Coghlan, 2016, p. 86). The aim of the philosophy is to place practical knowing as valid in the realm of science. *Praxis*, as introduced by Aristotle in the fourth century BC, differentiated knowing that existed through practice from that of theory (Eikeland, 2015). Aristotle never intended that these be seen as separate entities but rather *episteme* of knowing takes different forms. Eikland (2015) also claims there is a need to, "recover *praxis* conceptually in order to gather, recollect and justify itself properly" (p. 383). It is from this premise that the philosophy has been adopted to present the characteristics of the new knowledge established through the project.

The four characteristics of practical knowing drawn from Coghlan's (2016) philosophy are that it is:

- Focused on the everyday concerns of human living;
- Socially derived and constructed; it
- Requires attentiveness to the uniqueness of each situation; and it is
- Driven by values and is fundamentally ethical (p. 92).

In this research study these characteristics have been customised to a practical knowing *of how the development and evaluation of a resource could facilitate wellbeing for health professionals following a critical incident in National Women's Health*. The knowing was developed through the undertaking of the action research study. The following four characteristics were found in this study to be guiding principles when developing a support package that would facilitate health professional wellbeing:

- Silence is broken on the everyday effect of critical incidents;
- The social construction of multiple realities within the organisation is reflected in the content of the resource;

- Uniqueness of the service and the individual needs are captured through iterative cycles of action and reflection; and
- Individual and collaborative concern for each other after a critical incident needs to be present.

Table 12 outlines the progress through the phases to establish these characteristics of practical knowing. The first characteristic relates to the hidden rules guiding behaviour that were changed and made explicit through concepts in complexity theory. The underpinning theoretical framework of social constructionism helped unpack the multiple realities within the organisation and alongside the unique needs of individuals specific to National Women's Health. An individual and collaborative concern for each other was apparent throughout and essential in establishing robust practical knowing. In each phase the multiple cycles contributed to the knowledge of how it is in the aftermath of critical incidents and what is helpful to health professionals.

Table 12. Table showing contribution to practical knowing of how the development of an eBook can facilitate wellbeing following a critical incident.

Characteristic	Phase 1	Phase 2	Phase 3	Outcomes in relation to research question
Everyday concern	Established the everydayness of stressful reactions for health professionals following critical incidents through individual interviews, discussion groups and the literature.	Local expertise from within National Women's Health was available to create a solution to the everyday practice issue.	Evaluation of the eBook by potential users found it revealed their hidden fears and normalised the emotional response to critical incidents.	Silence is broken on the everyday effect of critical incidents through the development of a support package.
Socially derived and constructed	Identified how responses to critical incidents have been socially constructed leading to concern about what will happen next and who to contact for support.	Incorporated and challenged the different social constructions and beliefs that influence behaviours and support following a critical incident.	An improved state for support following a critical incident was made explicit in the eBook which recognises the keenness of colleagues to support their team members within the limitations of the organisation.	The social construction of multiple realities within the organisation is reflected in the content of the support package.
Attends to uniqueness	Cycles of action and reflection commenced to recognise the specific needs of health professionals in National Women's Health.	Through the cycles of action and reflection an eBook was created that began to reflect the needs of health professionals at National Women's Health.	Cycles of action and reflection continued until health professionals could identify themselves in the eBook and would access when they determined it was necessary.	Uniqueness of the service and the individual needs are captured in the support package through iterative cycles of action and reflection.
Value driven and ethical	Identified the need for health professionals to know they remain valued following a critical incident and alongside have the resources to support others in the team, including the woman and her family.	Participants in the study were willing to contribute to a resource that would help them to help others.	Through evaluating the action of developing an eBook the desperate need for a support resource was confirmed.	Individual and collaborative concern for each other after a critical incident needs to be present to create a support package that facilitates wellbeing.

The next section of this chapter highlights the changes and learning in practice that demonstrates these characteristics that are the outcome of this study. They are presented in the third person (connection with wider organisation), second person (through researching with others) and first person (my own inquiry). The reversal of order from that previously used (first, second and third) indicates the shift from the beginning focus on individual inquiry and the progression to practical knowing at an organisational level.

9.3 Silence broken on the everyday effect of critical incidents

The focus of practical knowing is on everyday concerns, issues or activities that face people working in their usual area of practice. For this study the area of practice was National Women's Health at Auckland District Health Board. The use of complexity theory provided concepts that helped understand the everyday concern and highlight where change was needed. Through story telling in Phase 1 the humanness in everyday experiences was captured. The participants spoke of what helped them in the aftermath of critical incidents and provided understanding of the system in which health professionals are an integral part. The energy in the complex system was exposed through "narratives which excite or anger people, etc. These are the points at which there is an emotional energy which holds the possibility for change" (Burns, 2015, p. 442). The themes running through the narratives provided insight into the type of resource required, and the content that was needed to help health professionals in practice. Phase 2 revealed that the expertise to create a support package was already present within the Service but it needed to be brought into one location and made accessible to all. Solutions to the everyday problem of support after critical incidents already existed but were not being used in practice. Participants were able to demonstrate this practical knowing through telling further stories or examples as they reviewed the content of the eBook. To capture the everydayness in the resource participants provided recorded stories that emulated the common emotions, needs and actions expected of others. The stories contained the wisdom of experiences that were shared in collegiality. The evaluation confirmed the dominant change, that the everyday concern that was previously hidden was now visible.

9.3.1 What changed in practice to break the silence?

The development and evaluation of the eBook that included my story and those of other health professionals made the reality of critical incidents in practice visible in the public arena. It is now located on the National Women's Health website within Auckland District Health Board, which is accessible both within the hospital environment and externally for any person (Austin & National Women's Health Auckland District Health Board, 2016b). It has been further recognised by the New Zealand Health Quality and Safety Commission, a national government organisation that works to improve health and disability support services, who have placed it on their website (Austin & National Women's Health Auckland District Health Board, 2016a). From this site another DHB has asked to adapt it for their area. The eBook had 307 people access it between its release in August 2016 and March 2017. There is tangible evidence that National Women's Health is concerned about the wellbeing of health professionals, a concern that is also apparent beyond the organisation.

Fellow participants and colleagues were willing to share their stories as role models. The impact of silence about the effect of critical incidents was recognised by the participants in the action research. In response they realised they could contribute to filling the vacuum. By not doing so they were creating an environment that perpetuated a “distorted view of what's normal” (Evaluation interview 5). In Phase 1 some health professionals interviewed were identified as champions as they were prepared to share their experiences as exemplified in the following quote from Chapter 6:

...people quite often look quite surprised when I'm prepared to say, well these are the bad things that have happened to me and this is what I was going to do about them, including resign. And actually everyone's had something [bad happen] but if no-one tells you about it ... (Constructing and Planning interview 5).

The action group endorsed the need for champions to be more visible within the service. The development of the eBook provided a proactive approach towards sharing stories. Through the participants' experiences the need for support and associated emotions were acknowledged. This was only made possible through the interactions and connections in the research. The recorded stories, now made public, exemplified the change in practice through making visible the impact of critical incidents.

Although tempted to stay silent I also had a responsibility to take action as a participant in the action research by sharing my own story. Included in the eBook is a recording of a story of the first critical incident I experienced. I had not shared this story before and now I have it recorded and placed in a public arena. The incident involved a woman falling when I was walking with her as a nursing student, setting back her rehabilitation significantly. Prior to this study I had kept the event in a protected box. Through reflection and articulating the story in preparation for the eBook I gained an understanding of why I had locked it away. I felt embarrassed and ashamed that I had contributed to harm, feelings similar to those of the participants in the interviews and literature (Calvert & Benn, 2015; Pezaro, 2016; Ullström et al., 2014). Despite the fact that it happened nearly 30 years ago I still harboured these feelings and could remember the incident in detail. The support I received at the time was unhelpful but not dissimilar to what was found in the study. Ofri (2010) in her writing of her personal experiences spoke of the benefits that could come from senior professionals sharing their own critical incidents. The facilitation of this study led to me role modelling the sharing of an incident that I had previously kept hidden and contributing to the breaking of the silence.

The stories were a powerful example of breaking the silence and this was the aim of the entire resource. In Chapter 7, Phase 2, the unconscious rules began to become visible in the creation of the eBook and were used to rewrite the rules above. It contained needed information on who to contact, how to provide support to each other and the team, and learning from incidents and investigation processes that may occur. This information was gathered from the interview participants, action group and content experts and was made easily accessible. The Evaluating Action phase assessed the move towards the desired state of increasing the visibility of critical incidents as an everyday event for health professionals. The participants connected their past experiences to the messages in the eBook. The information and stories they listened to were often familiar to them but they had considered only they felt this way. The invisibility of the impact of critical incidents is already known in the literature as shown in Chapter 2 (Jones & Smythe, 2015; Ullström et al., 2014; Young et al., 2015). What this action research achieved demonstrated how the collaborative development and evaluation of a support package could facilitate wellbeing through making the full impact of critical incidents and the needs of health professionals observable in everyday practice.

9.3.2 What was learnt through the action research?

Alongside tangible changes in practice, learning has occurred through the action research process. This section relates the learning to the characteristic of silence being broken on the everyday effect of critical incidents from the third person, second person and first person perspective.

Learning from people wider than the participant group occurs through the very act of undertaking action research. It potentially permeates all levels and groups in National Women's Health and beyond. The cycles of action and reflection brought together the health professionals to address the need to improve the support provided to colleagues or team members. As a result the voices of those who work directly in providing care began to be heard by the participants in management roles and vice versa. The culmination of this project was my presentation of the eBook at the National Women's Annual Report day (Auckland District Health Board, 2016a). The audience for this day included senior to junior health professionals, students and visitors from outside the organisation. The presentation and resource received resounding support with managers and clinical directors providing unreserved commendation in a public arena. Publication of the research is planned but action research in itself promotes dissemination through the process of taking action. "So much of our work as action researchers is, therefore, to acknowledge the systems of interconnection we live within, and how they have operated over time, then how to remove the trenchant obstacles to collaboration" (Bradbury, 2015a, p. 7). The very process of action research weakened the obstacles to our health professionals working together to develop and evaluate a support package to facilitate health professional wellbeing.

Action research triggers the release of capabilities and wisdom to address difficult situations that may otherwise remain dormant and hidden amongst colleagues. Following the decision to create an eBook there was a search for experts to work with me to create the content. The expertise was found to already exist within the service. Practical knowing addresses everyday issues where the identification of common concerns is followed by solutions to those concerns by the same group who raised them. "Significant stages in change are found not in access of fixity of attainment but in those crises in which a seeming fixity of habits gives way to a release of capacities that have not previously functioned: in times that is of readjustment and redirection" (Dewey,

1922/2002, p. 284). In response to the confirmation that support is an issue the action group members proposed the names of relevant people who could assist with developing the content both within the group and the wider National Women's Health service. Alongside contributing to the resource, they learnt about each other's skills and expertise that they could access in the future. The decision to use action research as the methodology for the study was a catalyst for this to happen.

My personal learning included the realisation that researching support following critical incidents had an impact on me as a health professional. Researching a topic that relates to stressful situations in participants, relevant to my own work situation had a compounding effect. Each time I explained the study topic to health professionals, including in social situations, they shared with me a story of their own. This confirmed the everydayness of the effect but also altered my perception of reality. I began to fear going to work, thinking critical incidents happened more often than they do. Concern for a researcher's wellbeing is well recognised in the literature (Dickson-Swift, James, Kippen, & Liamputtong, 2008; Kiyimba & O'Reilly, 2016) but not yet integrated into regular research preparation and practice (Barr & Welch, 2012; Stoler, 2002). A few years ago two Australian nurse researchers undertook a qualitative study of 15 nurse researchers and the workplace health and safety issues in nursing research (Barr & Welch, 2012). The impetus for their study was one of the author's personal experiences in researching postpartum depression. Alongside the interviews they reviewed the ethics applications of the 15 researchers. They noted risk aversion strategies for the study participants but no reference to "researcher safety, and the competency of the researcher in providing the required level of safety for participants and themselves during, and after the process of data collection" (p. 1541). It was also found that the ethics committees had not requested further information about these matters. The response of the authors was to create researcher safety guidelines. Interestingly most of the participants believed as I had that they would be able to cope with the data stating, "it would be unlikely they would become distressed" (p. 1541). Of greater concern to them was repetitive strain injury from the data entry.

I had not considered the impact of the research topic on my everyday work. This is in contradiction to the change the action group and I expected and observed from the few recorded stories shared with others in the eBook. I should not have anticipated that I

would be immune to the effect of listening to many stories. Therefore alongside the main phases of the action research study I worked through my own meta-cycle and learnt first-hand of the impact of researching the aftermath of critical incidents. A review of the literature indicated this too is an everyday concern for researchers and also needs to be made more visible.

9.4 Social construction of multiple realities within the organisation is reflected in the content

Collaboration is integral to action research. It was during the working together that an understanding was gained of the meaning of actions and inactions within National Women's Health in the aftermath of critical incidents. Through social constructionism the practical knowing was situated in the interrelations among the participants in the study. Together we constructed an eBook socially through those same relationships. As McNiff (2013) emphasises "although knowledge may be the product of an individual mind, that mind is always in relation with other minds, including the living mind of the planet" (p. 82). The group worked together to unpack and resolve the conflict between capturing how it is within the organisation at the present moment and the anticipated desired state.

9.4.1 What has changed in practice to capture the multiple realities?

The eBook is an example of social constructionism, where health professionals have worked together to create an artefact that will have benefits outside the research participants. It reflects the culture and practices of National Women's Health at the moment it was created. Future health leaders, managers and health professionals will be able to look back and have some knowledge of how it was in the aftermath of critical incidents. The reality of health care practice includes the wider societal influences that affect the system. Part of the organisational support for the tool is underpinned by the legal obligations of the new Health and Safety at Work Act 2015 (Health and Safety at Work Act 2015). The eBook has been timely to contribute to minimising stress for employees in the workplace following critical incidents. Using concepts from complexity theory the new Act may behave as an attractor in the system that will assist in maintaining the new equilibrium achieved through the introduction of the eBook and the completion of the study (Sarriot & Kouletio, 2015). The conditions in the

organisation are right for making change to the support received by health professionals in National Women's Health.

The eBook contains what is considered best practice for support; best practice that is socially constructed and agreed to through collaboration within the action group. In the busyness of practice a group of health professionals met over the course of two years to discuss, reflect and make decisions about how to improve support for each other in Women's Health. These interactions brought about a change in the meaning attributed to actions in the group. For example after reading the eBook a participant talked about how she may have missed the need to be aware of the impact on staff in her team when a Root Cause Analysis (RCA) investigation was required as discussed in Chapter 7:

*But it has made me think gosh it never occurred to me that, the effect on people when there is an RCA. I know being in a senior position why you're doing an RCA but do other people?
(Evaluation interview 5).*

To her a Root Cause Analysis was routine and until the interaction with others in this study she did not realise others interpreted it differently.

During the evaluation a concern was raised that the eBook may present a state that is idealistic, a comment that was then qualified by one participant who said that all aspects should occur but currently they were not part of their reality (Evaluation participant 7). Others found it more difficult to envisage suggestions in the eBook being possible within the constraints of the organisation such as taking time out from practice after a critical incident. There was a balancing between what needed to be included with that which was likely to happen, an agreement achieved by consensus of the action group. However, through the collaborative development and endorsement by management the actions that remained and were outlined in the eBook became expected as best practice. Statements about what is expected to happen in practice are now clearly documented in the eBook as a benchmark. Such guidance had not been available previously. The public nature of the eBook and its content created new meaning to the supportive interactions outlined within.

In this study I was the facilitator or the 'director' who connected health professionals together across the socially constructed, interdisciplinary power imbalances. As an insider researcher I stepped back and analysed the dynamics within the group. Listening

with a reflexive approach to the recordings after the meetings enabled me to modify the planned cycles to make more visible the quieter voices of the midwives in Phase 1. In Phase 2 the hidden needs of senior doctors leading the team at the time of a critical incident was brought to light during a one to one meeting. The self-employed midwives expressed how they felt excluded in the content of the eBook during the Evaluating Action phase and this was addressed in the revisions. As the facilitator of the study I created communicative spaces to enable voices to be heard and included in the support resource created.

9.4.2 What was learnt through action research?

The writing of this thesis is a parallel phase of action and reflection to the action research study. As emphasised by Coghlan and Brannick (2014) it is a new experience of learning for researchers when they “realize what they have been doing all along” (p. 169). The data, transcripts, notes from meetings and my journal came together as something new with a sense of fresh meaning. The writing up is a process of making the research, the change in practice and learning, understandable for an external reader. While documenting the story and reflection I was capturing the collective journey and ensuring I did not create interpretations for the participants that were not mine to make. The action research aimed to create local knowledge that was specific to National Women’s Health, while also providing insights that may be useful to other similar organisations.

There was learning through observing how members of the action group engaged with each other in the research. The participants with management roles appeared to prefer to express their thoughts through what they thought team members needed rather than to articulate their personal relationship with the study. During the study I was often not able to differentiate whether they spoke about their own views disguised as others or they were processing the study topic through the lens of what their colleagues required. Although the action group physically represented the multi-disciplinary health professionals, this did not necessarily mean it represented all their beliefs and needs. The action group had attracted participants who shared my concern and had the resources to attend. I realised that I needed to have been more attentive to the pre-understandings and the social reality of each participant to enable more open communication in the action group meetings. In essence the participation in the action

research process was constrained by the social construction of reality that the project was trying to address. Participants were inhibited by the unwritten rules. I was able to facilitate gaining insights into practice through anonymous interviews, however it was reliant on a few champions to make the distress public through the sharing of their stories. To gather the pre-understandings of the action group members I could have explored strategies with the group to do this at the beginning of the study. The members learning and reflection could have been captured by me suggesting they keep a personal journal (McNiff, 2013). However, the experience of other action researchers has found such activities to be ineffective in the busyness of practice. As discussed in Chapter 3 Nyman and colleagues (2016) asked midwives to write about their experiences during the action research but none were completed. Despite the constraints on the participation of members in the action group the hidden rules were identified and made visible. Potentially the strength of the rules were more powerfully shown through identifying that they even had an impact on influencing behaviour in a group of individuals who were engaged in improving support.

I have been personally empowered by the learning from this study to undertake action research in the future that is more inclusive, collaborative and outside my comfort zone. The inclusion of the health care assistants in the study was an identified gap in the literature yet I did not capture their voices in the study. The eBook reminds the users to consider the effect on auxiliary staff but the actual tool is unlikely to meet their personal needs. The reason for this was my own hesitancy and fear of failure. My past experiences and learning with others had shaped how I was in the study. I stayed with what was comfortable as an insider researcher, a disadvantage of that position. The only outsider perspective obtained in the project was that of my supervisors. There would have been benefit in having an external person on the team to challenge the socially constructed assumptions and decisions I had potentially made as an insider researcher. The learning developed my confidence and wisdom as an action researcher for future projects.

9.5 Uniqueness of needs of health professionals in National Women's Health

Previous studies confirm the second victim effect following critical incidents is wide spread (Dekker, 2013; Denham, 2007; A. W. Wu, 2000). The themes from such studies

have been published yet they are distanced from the participants and the organisation through academia. Their findings that show the impact of critical incidents is common are not readily available to the health professionals working where the action is. The aim of the resource was to make the knowledge from studies as well as the voices in the research easily accessible. Being able to relate to the tool was of utmost importance for it to be useful. There was a desperate need for users to see themselves, otherwise the information was likely to be dismissed. The assumption that an individual is more affected than everyone else was so strong that a self-employed LMC midwife said she would see the tool as less beneficial for her because it appeared to relate to employed midwives (Evaluation interview 6). Breaking the rules required communication of information that was intimately relevant and close to the potential users.

9.5.1 What has changed in practice that captures the uniqueness?

The development process of the resource is potentially generalisable to other organisations. The action research was undertaken to explore how the development and evaluation of a support package could facilitate health professional wellbeing within National Women's Health at ADHB. Although it was aimed to meet the local needs I received requests to link it to other organisations, including the National Health Safety and Quality Commission (Austin & National Women's Health Auckland District Health Board, 2016a). This indicates that the content resonates with the needs of practitioners in other areas. It can and has been applied more generally to other women's health services in New Zealand. Through connecting with colleagues in the cycles in each phase the uniqueness of the system in the aftermath of critical incidents became clearer. An increasing number of people became involved; their voices gathered, reflected upon and collaborative action taken. The circle of involvement widened, connecting the voices of the health professionals who spoke about 'what helped them after a critical incident' to the action group and the participants in the Evaluating Action phase. This last phase revealed a very strong need for health professionals to relate to the proposed strategies of support. The self-employed LMC midwifery voice was initially obscure. Two of the midwifery participants expressed concerns that there was no clear pathway of who they could contact within the organisation following a critical incident. Through their raising of this concern management designated a role to be that 'go to person' for all LMCs. An additional embedded cycle was undertaken to address this issue, unique to National Women's Health.

The cyclic process also challenged the previous perceptions and need for uniqueness. For example some participants believed specific groups experienced critical incidents in different ways and needed more assistance such as time off work. However, all professional groups shared stories of needing space after an event. This reality was exposed and linked to other research that also found each professional group had similar needs although they may be demonstrated in diverse ways (Farrow et al., 2013; Luu et al., 2012).

My involvement in the study has changed how I now support others and initiated an ongoing reflective process on how I could continue to improve that support. Engaging in the research immersed me in the personal and distressing experiences of critical incidents. Through listening to stories on what helped individuals in practice I realised past moments where I have missed providing the support colleagues required. When I listened to criticisms from participants about comments made to them such as that they should have called an emergency code earlier, which attributed blame to an individual, I reflected on the times I had posed similar questions (Constructing and Planning interview 2). I have missed opportunities in the past where I could have made a follow-up phone call to a colleague after a critical incident. The emotional involvement in the study, discussed previously, also enabled personal improvement in the way I am in practice. The personal impact from the study stimulated me to alter my way of being with others. As Heen (2015) suggests action research from a first person perspective is “an effort to change oneself into being a more fine-tuned instrument for one’s acting in the world generally and in the world of action research especially” (p. 619). Throughout the study I was hearing stories, stepping back, reflecting and deciding what action I needed to take to improve the ways I could facilitate health professional wellbeing following a critical incident.

9.5.2 What was learnt through action research?

Action research has the potential to bridge the gap between the competing drives for organisations wanting improvement to services, the need for rigour in project outputs and the expectation for those outputs to be relevant in the practice environment.

Traditional forms of quantitative research have long been critiqued for their limitations in addressing the uniqueness of health care practice. The adoption of quality improvement methods such as lean thinking and six sigma have been widely used

without evidence of effect or demonstration of rigour (Itri et al., 2016; Samman & Ouenniche, 2016). Both quantitative research and improvement tools attempt to control the environment and reduce variation in the area of study but as Dewey argues:

“Present” activity is not a sharp narrow knife-blade in time. The present is complex, containing within itself a multitude of habits and impulses. It is enduring, a course of action, a process including memory, observation and foresight, a pressure forward, a glance backward and a look outward (Dewey, 1922/2002, p. 281).

Many qualitative methods also miss capturing the complexity in the system of health care practice and have limited ability to initiate change. Morse (2012) emphasises the requirement for health researchers to use a specific type of methodology that captures the unique, subjective, emotional and relational aspects of engagement in care. There is a need to do as Dewey states above and look more closely at the influences that are a reality in practice. Outcomes are not isolated events, separated from the past or future. The action research methodology is able to do this through bringing together multiple forms of data, collaboratively attending to its meaning and implementing changes that can be revised through repeated cycles thus gathering knowledge on change that is relevant to the workplace. This study has provided National Women’s Health with the experience and practical knowing that comes from action research.

Some participants were surprised by their need to see themselves so strongly in the tool. They were actively looking for differences between themselves and the eBook to justify why they would still be unsupported within the service or blamed for an outcome. The power of stories was strong no matter the health professional yet each had their own stories that were different. During the evaluation the participants realised how important those differences were in relating to the resource. Developing practical knowing requires close attention to the uniqueness of each situation, something that was attended to through the repeating cycles.

My own reflective skills developed in the study that improved the way I led the action research project. More significantly the very act of being part of action research provided new insights into the methodology that could not be learnt through reading textbooks or being taught by an expert. Specific skills learnt include listening during interviews. It was through listening to the recordings and reflecting on what I heard that I realised I talked before participants had completed their stories or pre-empted what

they were going to say next. Listening to the recordings of the group discussions revealed the same interrupting of people's conversations. As the lead researcher who was facilitating all voices to be heard I made changes to improve my own conversational techniques and leading of the group and then checked the change had been enacted in the future recordings.

9.6 Individual and collaborative concern for each other

There is a strong national and international desire and an ethical responsibility to facilitate wellbeing for health professionals. Although the literature is sparse on what works in practice to provide effective support after a critical incident (Pinto et al., 2012; Schwappach & Boluarte, 2009) recent studies have been undertaken to identify what is needed. The survey by Perazo and Clyne (2015) established the acceptability of an online intervention and the plan is to put such a strategy in place in the United Kingdom. In New Zealand Calvert and Benn (2015) have proposed that professional emotional support be provided due to the blame midwives experience after poor outcomes. The very recent launch of a website in Australia dedicated to the health of nurses and midwives again indicates the rising profile of the needs of health professionals (Nurse and Midwife Support, 2017). The effectiveness of the first three characteristics is underpinned by realising and acknowledging the individual and collaborative concern health professionals have for each other.

9.6.1 What has changed in practice that demonstrates collegial concern?

The methodology, findings and conclusion of the study are open to scrutiny to be judged as worthwhile, or not, by others. The writing up of this thesis is making the findings of the study public, with the practical knowing being available to other organisations and services to utilise and adapt. Transparency of choice points throughout the story and reflection have therefore been made explicit for the potential readers to judge the authenticity of the study (Coghlan & Brannick, 2014). The move towards the desired state of improved support has been described in detail through cycles of action and reflection with the anticipation that it can be considered for use by other services. The publication of the study will add to the much needed practical knowing of what works in practice to facilitate health professional wellbeing.

To create something good for their colleagues health professionals readily accepted the offer to be part of the research project, both as participants for the individual interviews and in the group meetings. There was a shared concern for wellbeing. An unsupportive environment was the trigger for this study however among the participants there was no evidence of individuals intending to be unhelpful to their colleagues. There were no comments that an individual should be blamed for an outcome although all experienced feelings of being blamed. People were found to be unaware of the impact their accumulated actions had. Therefore at times they judged and responded negatively to actions that were a result of the unconscious rules in the system. Actions that were interpreted in this way were potentially the result of behaviours driven by the rules to maintain an individual's own perception of fitting in and feeling safe. Participants spoke of choosing to keep quiet as this appeared to be the normal or expected response and then releasing their emotions in private. In making visible the common effects of critical incidents through the action research study, including the eBook, it has also made visible the inherently good intentions of our colleagues towards each other. Actions or inactions have been driven by the socially constructed meanings associated to them within National Women's Health. Understanding this will decrease the risk of health professionals being further blamed for being unhelpful and unkind to each other.

Specific actions were also interpreted as an indication of blame due to the meaning attached from previous experiences such as removing the woman's clinical record or notes, not receiving information from incident review investigations or being offered time away from the work place. Bringing the inferred meaning to the forefront for these activities has contributed to managers in the study being more aware of the effect of their actions leading to an expressed plan to change their behaviour (Action group participant; Evaluation interview 5). These individuals expressed how they were previously unaware of the impact of their actions demonstrating an underlying goodness and intention among health professionals to help each other. It is anticipated that this knowledge will be perpetuated through this study and ongoing work that is occurring in National Women's Health (Auckland District Health Board, 2017). The willingness of participants to engage in the study indicates a concern for each other and desire to do what is considered good.

My aim in undertaking a research project was to bring about change in an area that concerned my colleagues and me and that resulted in improvement in an area of practice. I wanted to do something good. The literature review combined with my experience in practice convinced me that health professionals were being harmed by the lack of support. This knowledge was compelling for me to continue facilitating the study to its completion. I felt ethically obliged to ensure the voices of the participants were made visible. Completion was not only having the eBook available on the website but ensuring health professionals knew it was there. Following the launch at the National Women's Annual Report day I ensured the link was circulated to all the participants, professional groups and via Service wide email distribution lists. I created flyers and informed the educators directly for their study days. The promotion of the eBook and the findings of the study is ongoing with presentations to midwives, students and a request to publish in the *O&G Magazine* for the Royal Australian and New Zealand College of Obstetricians and Gynaecologist which has a readership of more than 6000 Fellows and trainees (Austin, Ferkins, Swann, & Smythe, 2017).

9.6.2 What was learnt?

Although there was a large number of participants throughout the three phases the participation could have been made easier by a more flexible research agreement included in the initial ethics application. The information sheets were written for specific activity points in the study such as action group meetings and interviews. In action research Holian and Coghlan (2013) argue for a "more flexible covenantal agreement which is monitored and re-negotiated as the research develops and progresses over time" (p. 409). In future action research study I would consider how I developed the consent form so ad hoc meetings and snow balling of conversations could be encouraged and with potentially greater participation.

There were challenges of time constraints and competing expectations in the health environment. The flexibility of data collection enabled more people to participate. The validity of this data was then ensured by bringing it back to the action research group. The action research methodology enabled fifty health professionals to contribute to facilitating wellbeing and making positive change in National Women's Health.

The greatest learning and change was in attitudes. In this study changing the rules that guide behaviour was more important than the created object (Dewey, 1910; McNiff,

2013). The eBook was a means to do this in this study however through action research it is through the action not the outputs that real change in practice occurs. This was a challenge to my pragmatic perspective as I initially focused on a physical output. McNiff (2013) encourages confidence in the role of the action researcher as facilitator of personal and collaborative development. Our role is one of social change and that change “begins in the mind” (p. 83). Although it is satisfying to have the product of an eBook it is seeing the change in behaviour and attitudes that result in improved wellbeing that is going to be most satisfying.

9.7 Limitations of the study

Many of the limitations of this action research study have been captured as learning in previous sections of this chapter. Further limitations are included below.

9.7.1 External influences

The system that is the aftermath of critical incidents is open to the influences of the environment. In this study these included the expectations of individual accountability by women and their families. On the legislative side the new Health and Safety at Work Act 2015 (Health and Safety at Work Act 2015) advocates reducing the hazards for employees from work related stressors, of which critical incidents is one. The societal expectation, however can dominate in contributing to feelings of blame and shame, something that this study was unable to address. New rules to alter behaviour in the system may have been introduced, however the system could readapt to maintain the status quo in response to the ongoing external inputs.

9.7.2 Influences of insider research and representation

My assumptions and local knowledge may have influenced the people I approached and those willing to come forward. Throughout the study I have reflected on my positionality and potential influence of power or advantage. Without external oversight or examination of the interactions within the study, there was the possibility that power balances remained unchallenged. The use of external personnel or formal tools to examine the power interplay could have assisted in a stronger examination of this area and its affect on the study. Combined with the small number of health professionals who were interviewed in Phase 1 and Phase 3 the themes may not be representative of all health professionals. It may be that only those willing to see improvement and

change to the blame culture decided to take part. As discussed in Chapter 6 the participants appeared to be the champions.

The participants guided the content of the eBook resource and through the evaluation gaps in the content and knowledge were identified and added. The health professionals in this study did not ask for specific education or links to training on how to support the first victim as they suffer the grief of a poor outcome. Guidance was provided in relation to open disclosure, an organisational requirement, but not from the perspective of the woman and her family. Possible resources could have included existing training providers at Auckland District Health Board such as Bereavement services, or community training via The Grief Centre and Employment Assistant Programme providers. These could be included to future revisions of the Critical Incident eBook.

9.7.3 Future research

The research into everyday concerns will always be incomplete. The system will continue to readjust and new concerns will come to the surface. People will need to continue to collaboratively address new problems in practice. As Dewey (1922/2002) points out the completion of a project is not in fact the end but rather a stimulus for further change that needs further investigation to understand:

Indeed every genuine accomplishment instead of winding up an affair and enclosing it as a jewel in a casket for future contemplation, complicates the practical situation. It effects a new distribution of energies which have henceforth to be employed in ways for which in past experience gives no exact instruction (p. 285).

Further evaluation of the long term effect of the eBook and the action it has stimulated needs to be undertaken in the service. The new rules may not result in changed behaviour for some, or, they may lead to unexpected changes that are unhelpful. This study is the beginning of a journey in improving support for health professionals. As Dewey (1922/2002, p. 282) points out, “It is better to travel than to arrive, it is because travelling is a constant arriving, while arrival that precludes further travelling is most easily attained by going to sleep or dying.” Evaluation of the eBook with a wider group of health professionals and support staff is required to establish and understand the effect on wellbeing following a critical incident.

Undertaking an action research study in another service of Auckland District Health Board or in another organisation could affirm or add to the characteristics identified in this study that need to be present when developing a support package. The use of complexity theory to analyse the findings in another environment could establish whether the rules are isolated to National Women's Health or can be generalised to other areas. As recommended by Nieuwenhuijze and colleagues (2015, p. 842), "More research is needed to unpack the nature of the 'black box' of complex systems to identify successful concepts and elements of change in maternity care specifically, and health care more widely."

9.8 Conclusion

As an action researcher I have traversed the "swampy lowlands" (Coghlan & Brannick, 2014, p. 177) of my organisation to bring to fruition practical knowing of how the development and evaluation of a support package can facilitate health professional wellbeing within National Women's Health. Pragmatism guided the choice of methodology to bring about change for the practical problem of an unsupportive environment that was shared by many health professionals. The theories of complexity and constructionism underpinned the cycles of action and reflection to provide insights for learning and change in the system. The unconscious rules that guided behaviour were rewritten through the collaborative research process that included the development of the eBook. Change and learning has occurred in practice and new meanings attributed to actions amongst health professionals.

The study has contributed to addressing a topical, everyday concern by both creating a resource and providing a list of guiding principles that, when present, transform action to change in practice in the aftermath of critical incidents. The characteristics of these principles being:

- Silence is broken on the everyday effect of critical incidents;
- The social construction of multiple realities within the organisation is reflected in the content of the resource;
- Uniqueness of the Service and the individual needs is captured through iterative cycles of action and reflection; and

- Individual and collaborative concern for each other after a critical incident needs to be present.

In the journey to improving support and wellbeing the invisibility of the effect of critical incidents and the assumptions that guide behaviour have been brought to light. The eBook has collected together assumptions and exposed their inaccuracies and its coming into existence is a change for the system in the aftermath of critical incidents. The full effects on the emergent system will only come to full realisation with time. Improving issues in practice is never completed; there is no end point. Further phases of Constructing and Planning Action, Taking Action and Evaluating Action are required to establish the effect of the new rules on the long term behaviour of health professionals and the equilibrium in the system of National Women's Health in the aftermath of critical incidents. However at this point in time this thesis demonstrates how action research has provided a practical knowing of how a support package facilitates health professional wellbeing in practice at National Women's Health.

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Appendix A: Ethics Approval from AUTECH



16 October 2014

Liz Smythe
Faculty of Health and Environmental Sciences

Dear Liz

Ethics Application: **14/319 Facilitating health professional wellbeing following involvement in a critical incident.**

Thank you for submitting your application for ethical review. I am pleased to confirm that the Auckland University of Technology Ethics Committee (AUTECH) has approved your ethics application for three years until 13 October 2017.

AUTECH wishes to commend you and the researcher on the overall quality of your application.

As part of the ethics approval process, you are required to submit the following to AUTECH:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 13 October 2017;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 13 October 2017 or on completion of the project;

It is a condition of approval that AUTECH is notified of any adverse events or if the research does not commence. AUTECH approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTECH grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this.

To enable us to provide you with efficient service, we ask that you use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

A handwritten signature in black ink, appearing to read 'K O'Connor', is placed above the printed name of the Executive Secretary.

Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Diana Austin daustin@clear.net.net.nz; Jennie Swann

Auckland University of Technology Ethics Committee
WA505D Level 5 WA Building City Campus
Private Bag 92006 Auckland 1142 Ph: +64-9-921-9999 ext 8316 email ethics@aut.ac.nz

19 March 2015

Liz Smythe
Faculty of Health and Environmental Sciences

Dear Liz

Re: Ethics Application: **14/319 Facilitating health professional wellbeing following involvement in a critical incident.**

Thank you for your request for approval of an amendment to your ethics application.

I have approved the minor amendment to your ethics application allowing changes to the recruitment criteria.

I remind you that as part of the ethics approval process, you are required to submit the following to the Auckland University of Technology Ethics Committee (AUTEC):

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 13 October 2017;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 13 October 2017 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,



Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Diana Austin daustin@clearnet.co.nz, Jennie Swann

AUTEC Secretariat

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6 July 2015

Liz Smythe
Faculty of Health and Environmental Sciences
Dear Liz

Re: Ethics Application: **14/319 Facilitating health professional wellbeing following involvement in a critical incident.**

Thank you for your request for approval of amendments to your ethics application.

I have approved minor amendments to your ethics application allowing changes to the data collection protocols (collection of critical event story), the Information Sheet and the Consent Form.

I remind you that as part of the ethics approval process, you are required to submit the following to the Auckland University of Technology Ethics Committee (AUTEC):

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 13 October 2017;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 13 October 2017 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,



Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Diana Austin lp.dm.austin@clear.net.nz; daustin@aut.ac.nz, Jennie Swann

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3 December 2015

Liz Smythe
Faculty of Health and Environmental Sciences

Dear Liz

Re: Ethics Application: **14/319 Facilitating health professional wellbeing following involvement in a critical incident.**

Thank you for your request for approval of an amendment to your ethics application.

I have approved the minor amendment to your ethics application allowing changes to the data collection protocols.

I remind you that as part of the ethics approval process, you are required to submit the following to the Auckland University of Technology Ethics Committee (AUTEC):

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 13 October 2017;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 13 October 2017 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,



Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Diana Austin lp.dm.austin@clear.net.nz; daustin@aut.ac.nz, Jennie Swann

Appendix B: Approval from the Māori Research Committee from the Waitematā and Auckland District Health Boards



He Kamaka Waiora
Waitematā and Auckland DHB
Level 2, 15 Shea Terrace,
Auckland 0740,
New Zealand
Private Bag: 93-503

11/11/2014

Diana Austin
8b Wapiti Avenue
Epsom
Auckland

Re: Facilitating health professional wellbeing following involvement in a critical incident.

Thank you for providing the ADHB low risk application, the confidentiality forms and the participant information and consent forms. The study seeks to develop and evaluate a support package for second victims (health professional who have been impacted on by a traumatic event within the work place). The investigator will endeavour to interview 10 to 30 employees within the ADHB Womens Health Services.

In regard to Māori responsiveness the investigator has consulted with Māori and incorporated suggestions made into the study methodology, Māori will be included as participants, and endeavours will be made to incorporate Māori views into the self-care package.

The investigator highlights there is little information on Māori and critical incidences. Has the investigator explored the literature around Māori and major incidences and some of the Māori psychological literature on Māori values and beliefs?

Further when using qualitative data the numbers are less important than the content of the data. Hence while there may only be 1 or 2 Māori participants the information rich data generated will provide some meaningful cultural data. I would draw on some of the literature on Māori values and beliefs and Māori health models to help narrow down some of the information. I expect you will use some sort of post consultation validation to help in the analysis of Māori data?

Would the investigator please provide an algorithm of the action research process?

Please add the following to the participant information and consent form:

- If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

On behalf of the Māori Research Committee at the Waitematā and Auckland District Health Boards the study had been approved.

Heio ano

H. A. Wihongi

Dr Helen Wihongi
Research Advisor – Māori
Waitematā and Auckland DHB
Level 2, 15 Shea Terrace, Auckland 0740,
New Zealand
Private Bag: 93-503
p: +64 9 486 8920 ext. 3204
m: + 64 21 0203 1167
email helen.wihongi@waitematadhb.govt.nz

Tereki Stewart
Chair Person
Māori Research Committee
Te Runanga o Ngati Whatua
1 Rendall Place, Eden Terrace, Auckland
PO Box 108040, Symonds Street, Auckland
p. +64 9 366 1993 f. +64 9 366 1977
m. +64 21 822 902
email tstewart@tihora.co.nz

Auckland District Health Board Research Office approval

From: Mary-Anne Woodnorth (ADHB)
Sent: Tuesday, 11 November 2014 1:01 p.m.
To: Diana Austin(ADHB)
Subject: 6525- conditional Maori approval

Dear Diana,

Please find attached the ADHB Maori approval for your study "Facilitating health professional wellbeing following involvement in a critical incident" (A+6525). The conditions of the approval are in the attached letter and you should follow up with Dr Wihongi directly.

As for our process I can now approve your study to commence after you provide the letter of AUT ethical approval.

Kind regards,

Mary-Anne

Mary-Anne Woodnorth, PhD

Manager, ADHB Research Office
Auckland City Hospital
Level 14, Support Building,
Park Road, Grafton,
Private Bag 92024
Auckland 1142, NZ
Tel: +64 9 307 4949 (Ext: 23854)
Fax: +64 9 3078931 internal 23855
<http://www.adhb.govt.nz/ResearchOffice>

Appendix C: Tools

- a) Interview Questions
- b) Participant Information Sheets and Consent Forms (including amendments)
 - Interview Participant – Phase 1
 - Stakeholder Group Participant & amendment – Phase 1
 - Action Research Participant & amendment– Phase 1, 2 & 3
 - Interview Participant – Evaluation Phase 3

Interview Questions

Interview questions for participants in Phase 1

Tell me about a time when you were involved in a critical incident

What helped you through this experience?

Interview guidance as part of 'thinking aloud' technique for participants in Phase 3

Tell me your initial reactions when you started looking at it...

Talk aloud about what made you select the specific chapter...

Tell me how it worked for you...

As you read what is going through your mind?

Information Sheet Interview Participant



Date Information Sheet Produced:

23 September 2014

Project Title

Facilitating health professional wellbeing following involvement in a critical incident.

An Invitation

My name is Diana Austin. I am undertaking a research project to explore and develop a support package for health professionals following a critical incident, as part of my Doctorate in Health Science. I am employed as a midwife at Auckland District Health Board (ADHB) and a midwifery lecturer at AUT. Currently I am seconded into the position of Clinical Governance Coordinator at ADHB.

I would like to invite you to take part in this research which will involve an interview of approximately 60 - 90 minutes. Participation is voluntary, please read the following information about the study and what is involved to assist in deciding whether you would want to be involved.

What is the purpose of this research?

Support for health professionals following a critical incident within Women's Health at ADHB has been identified as a gap. It is known that being involved in critical incidents can be traumatic and that support is important at this time. The purpose of the study is to explore, develop and evaluate a support package alongside health professionals who work in the service. The findings from the study will hopefully provide some guidance on how best to provide support within Women's Health. The final report will be provided to the service as well as being published and presented at relevant conferences. The completion of the study will enable me to complete a Doctorate in Health Science.

How was I identified and why am I being invited to participate in this research?

You are being invited to be part of the research as you have indicated an interest following advertising within Women's Health at ADHB. The study requires a representative sample of health professionals.

What will happen in this research?

The study will use Technical Action Research as the methodology. Action research involves a series of cycles. Each cycle consists of planning, acting, observing and reflecting which then leads on to another cycle with the same steps, resulting in improvement or a specific outcome. For this study an initial cycle, called the reconnaissance will be used. In this cycle up to 10 participants will be recruited, representing each of the professional groups in Women's Health. I will meet with each of the participants individually to listen to their stories following questions such as; "tell me about a time when you were involved in a critical incident", "what helped you through this experience?" The themes from these stories will be used to help develop a support package. Each interview will take approximately 1 – ½ hours. The information will be recorded during the story telling and then transcribed. You will be given a copy of the transcription for

verification that the information is correct. The information will be anonymised during the analysis and kept confidential. Excerpts from the stories told may be used in the presentation to participants in subsequent groups to assist with development.

What are the discomforts and risks?

The discussion of critical incidents can be distressing. It can bring unresolved trauma to the surface. Sharing details of where outcomes have not been good can create a feeling of vulnerability. During the 'story telling' you will be able to stop at any time. If an issue has been raised that you would like to talk more about support is available via Counselling Services at AUT.

Contact details

AUT: contact the centres in person, or by phone 09 921 9992 for City campus (WB219) and South Campus (MB reception) or 09 921 9998 North Shore Campus (AS104) to make an appointment.

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Under the Health Practitioners Competence Assurance Act 2003 all health practitioners have a responsibility to protect patients from risk and report individuals where there is a concern about competence. This study is not exempt from the Act. You are reminded that you do not need to answer questions or share information unless you are comfortable doing so. The study is focusing around the positive aspects of support and what works well.

What are the benefits?

The evidence from both our local Women's Health service and from the published literature in New Zealand and internationally has shown that currently health professionals are not well supported after a critical incident. This can affect health professionals' emotional wellbeing. It is not clear what the best support to provide is. This study is using an action research approach which means the participants and the researcher work together to design the outcome, in this case a support package to use after a critical incident. As a participant you will be able share your stories of what worked well after an incident and inform the development of support strategies. The findings of the study will be shared with the leadership team of Women's Health and published to promote improved support for health professional wellbeing.

Completing the study will also enable me to gain a Doctorate in Health Science.

How will my privacy be protected?

No names will be associated with the taped interviews, transcriptions or in the final report. The information shared will be stored in a secure storage area. Limited confidentiality only can be guaranteed as another health professional may be able to recognise your comment used in the report to support a theme. Interviews will be offered offsite to minimise your association with the study and potential identification. You will be given an opportunity to review the transcripts prior to any content or themes being shared and remove any part of the transcript.

What are the costs of participating in this research?

Participating in the interviews may require you to meet with me in your own time. Each interview will take approximately 1-1.5 hours. Additional costs created by this such as travelling or parking will be accommodated.

What opportunity do I have to consider this invitation?

I would appreciate it if you could advise me whether you consent to being part of the study in 2 weeks by phoning or emailing me.

How do I agree to participate in this research?

Once you agree to participate you will be required to complete a Consent Form which I will provide to you at the time we organise the date for our interview.

Will I receive feedback on the results of this research?

A summary of the findings of the study will be provided to you and potentially you will be able to use the support package developed or other strategies recommended from the study.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Liz Smythe, liz.smythe@aut.ac.nz, 021351005

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AJTEC, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

If you would like further information please contact me;
Diana Austin
Mobile 021492321
Email daustin@aut.ac.nz

Project Supervisor Contact Details:

Dr Liz Smythe
Mobile 021351005
Email liz.smythe@aut.ac.nz

Dr Jennie Swann
Mobile 021753025
Email jennie.swann@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 10 October 2014,

AJTEC Reference number 14/319.

ADHB Research Office A*0525

Consent Form

Interview Participant



Project title: Facilitating health professional wellbeing following involvement in a critical incident

Project Supervisor: Dr Liz Smythe, Dr Jennie Swann

Researcher: Diana Austin

- I have read and understood the information provided about this research project in the Information Sheet dated 23 September 2014.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- I agree to take part in this research.
- I wish to receive a copy of the report from the research (please tick one): Yes No

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Participant's signature:

Participant's name:

Participant's Contact Details: (email and / or phone number)

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.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 16th October 2014

AUTEC Reference number 14/319

ADHB Research Office A+6525

Note: The Participant should retain a copy of this form.

Information Sheet Stakeholder Group Participant



Date Information Sheet Produced:

23 September 2014

Project Title

Facilitating health professional wellbeing following involvement in a critical incident

An Invitation

My name is Diana Austin. I am undertaking a research project to explore and develop a support package for health professionals following a critical incident, as part of my Doctorate in Health Science. I am employed as a midwife at Auckland District Health Board (ADHB) and a midwifery lecturer at AUT. Currently I am seconded into the position of Clinical Governance Coordinator at ADHB.

I would like to invite you to take part in this research as a member of the stakeholder group. You are being asked as you are already part of the ADHB working group that is aiming to improve the management of critical incidents within Women's Health. Participation is voluntary, please read the following information about the study and what is involved to assist in deciding whether you would want to be involved.

What is the purpose of this research?

Support for health professionals following a critical incident within Women's Health at ADHB has been identified as a gap. It is known that being involved in critical incidents can be traumatic and that support is important at this time. The purpose of the study is to explore, develop and evaluate a support package alongside health professionals who work in the service. The findings from the study will provide some guidance on how best to provide support within Women's Health. The final report will be provided to the service as well as being published and presented at relevant conferences. The completion of the study will enable me to complete a Doctorate in Health Science.

How was I identified and why am I being invited to participate in this research?

As stated above you are being invited to participate in the research as you are part of the existing working group in ADHB Women's Health developed to improve the management of critical incidents. Your expertise within the working group is recognised as being valuable to the research. Your role will be to take part in a discussion group or 'action group' that reviews the information obtained from interviews with health professionals and how it could inform a support package.

What will happen in this research?

The study will use Technical Action Research as the methodology. Action research involves a series of cycles. Each cycle consists of planning, acting, observing and reflecting which then leads on to another cycle with the same steps, resulting in improvement or a specific outcome.

For this study an initial cycle, called the reconnaissance will be used. In this cycle up to 10 participants will be recruited, representing each of the professional groups in Women's Health. I will meet with each of the participants individually to listen to their stories following questions such as; "tell me about a time when you were involved in a critical incident", "what helped you through this experience?" The themes from these stories will be used to help develop a support package.

The themes will then be presented to a stakeholder group and a representative group of health professionals working clinically, who together will form the action research group. Women's Health already has a working group set up of key stakeholders to improve the implementation of the current management of critical incidents. I would like members of this group to consider being part of the stakeholder group for the research project. The meetings where the findings of the reconnaissance phase are presented and discussed would be recorded and transcribed. The information from these meetings would be used to inform the development of a support package, as part of the action research cycle.

What are the discomforts and risks?

The discussion of critical incidents can be distressing. It can bring unresolved trauma to the surface. If an issue has been raised that you would like to talk more about support is available via Counselling Services at AUT.

Contact details

AUT: contact the centres in person, or by phone 09 921 9992 for City campus (WB219) and South Campus (MB reception) or 09 921 9998 North Shore Campus (AS104) to make an appointment.

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Under the Health Practitioners Competence Assurance Act 2003 all health practitioners have a responsibility to protect patients from risk and report individuals where there is a concern about competence. This study is not exempt from the Act. You are reminded that you do not need to share information unless you are comfortable doing so.

What are the benefits?

The evidence from both our local Women's Health service and from the published literature in New Zealand and internationally has shown that currently health professionals are not well supported after a critical incident. This can affect health professionals' emotional wellbeing. It is not clear what the best support to provide is. This study is using an action research approach which means the participants and the researcher work together to design the outcome, in this case a support package to use after a critical incident. As part of the stakeholder group you will be able to provide interpretation of the themes developed in the reconnaissance phase from a leadership and senior clinician perspective. The findings of the study will be shared with the leadership team of Women's Health and published to promote improved support for health professional wellbeing.

Completing the study will also enable me to gain a Doctorate in Health Science.

How will my privacy be protected?

No names will be associated with the recorded meeting, transcriptions or in the final report. The information shared will be stored in a secure storage area. Limited confidentiality only can be guaranteed as another member of the service may be able to recognise your comment used in the report. You will be given an opportunity to review the transcripts for accuracy and remove any part of the transcript if required.

What are the costs of participating in this research?

It may be possible to extend the current working group meetings or an additional one or two meetings of the working group may need to be organised. It is anticipated this will occur in your normal working day.

What opportunity do I have to consider this invitation?

I would appreciate it if you could advise me whether you consent to being part of the study in 2 weeks by phoning or emailing me.

How do I agree to participate in this research?

Once you agree to participate you will be required to complete a Consent Form which I will provide to you at the time we organise the meeting date.

Will I receive feedback on the results of this research?

A summary of the findings of the study will be provided to you and potentially you will be able to use the support package developed or other strategies recommended from the study.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Liz Smythe, liz.smythe@aut.ac.nz, 021351005

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

If you would like further information please contact me;
Diana Austin
Mobile 021492321
Email daustin@aut.ac.nz

Project Supervisor Contact Details:

Dr Liz Smythe
Mobile 021351005
Email liz.smythe@aut.ac.nz

Dr Jennie Swann
Mobile 021753025
Email jennie.swann@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 16 October 2014,

AUTEK Reference number 14/319

ADHB Research Office A+6525

Consent Form

Stakeholder group participant



Project title: Facilitating health professional wellbeing following involvement in a critical incident

Project Supervisor: Dr Liz Smythe, Dr Jennie Swann

Researcher: Diana Austin

- I have read and understood the information provided about this research project in the Information Sheet dated 23 September 2014.
- I have had an opportunity to ask questions and to have them answered.
- I understand that identity of my fellow participants and our discussions in the stakeholder group is confidential to the group and I agree to keep this information confidential.
- I understand that notes will be taken during the group discussion and that it will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that while it may not be possible to destroy all records of the stakeholder group discussion of which I was part, the relevant information about myself including tapes and transcripts, or parts thereof, will not be used.
- I agree to take part in this research.
- I wish to receive a copy of the report from the research (please tick one): Yes No

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Participant's signature:

Participant's name:

Participant's Contact Details (email and / or phone number):

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.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 16th October 2014

AUTEC Reference number 14/319

ADHB Research Office A+6525

Note: The Participant should retain a copy of this form.

Information Sheet

Action Research Participant



Date Information Sheet Produced:

23 September 2014

Project Title

Facilitating health professional wellbeing following involvement in a critical incident

An Invitation

My name is Diana Austin. I am undertaking a research project to explore and develop a support package for health professionals following a critical incident, as part of my Doctorate in Health Science. I am employed as a midwife at Auckland District Health Board (ADHB) and a midwifery lecturer at AUT. Currently I am seconded into the position of Clinical Governance Coordinator at ADHB.

I would like to invite you to take part in this research as a member of an **action research group**, a group that includes a representation of health professionals who work in direct contact with women and their families. The purpose of this group is to work with the researcher in developing a support package, using the data collected in the previous stage of the research. Participation is voluntary, please read the following information about the study and what is involved to assist in deciding whether you would want to be involved.

What is the purpose of this research?

Support for health professionals following a critical incident within Women's Health at ADHB has been identified as a gap. It is known that being involved in critical incidents can be traumatic and that support is important at this time. The purpose of the study is to explore, develop and evaluate a support package alongside health professionals who work in the service. The findings from the study will provide some guidance on how best to provide support within Women's Health. The final report will be provided to the service as well as being published and presented at relevant conferences. The completion of the study will enable me to complete a Doctorate in Health Science.

How was I identified and why am I being invited to participate in this research?

You are being invited to participate as you are a health professional working directly with women and their families. As such you are in the best place to provide guidance on how a support package could be developed that is relevant to the work situation. Your role will be to take part in a discussion group or 'action group' that reviews the information obtained from interviews with health professionals and how it could inform a support package.

What will happen in this research?

The study will use Technical Action Research as the methodology. Action research involves a series of cycles. Each cycle consists of planning, acting, observing and reflecting which then leads on to another cycle with the same steps, resulting in improvement or a specific outcome.

2014 Action research participant

For this study an initial cycle, called the reconnaissance was used. In this cycle approximately 10 participants were recruited, representing each of the professional groups in Women's Health. I met with each of the participants individually to listen to their stories following questions such as; "tell me about a time when you were involved in a critical incident", "what helped you through this experience?" The themes from these stories will then be used to help develop a support package.

The themes will have been presented to a working group of key stakeholders. They are also going to be presented to a group of health professionals (which you are invited to be part of) working clinically, who together will form the action research group. I would like you to consider being part of the representative group of health professionals who can work with the researcher to develop a support package. Due to the nature of the workforce meeting as a group may not be possible so the themes from the previous cycle will be shared with you individually or in small groups. These discussions or small meetings would be recorded and transcribed. The information from these meetings will be used to inform the development of a support package, as part of the action research cycle.

What are the discomforts and risks?

The discussion of critical incidents can be distressing. It can bring unresolved trauma to the surface. If an issue has been raised that you would like to talk more about support is available via Counselling Services at AUT.

Contact details

AUT: contact the centres in person, or by phone 09 921 9992 for City campus (WB219) and South Campus (MB reception) or 09 921 9998 North Shore Campus (AS104) to make an appointment.

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Under the Health Practitioners Competence Assurance Act 2003 all health practitioners have a responsibility to protect patients from risk and report individuals where there is a concern about competence. This study is not exempt from the Act. You are reminded that you do not need to share information unless you are comfortable doing so.

What are the benefits?

The evidence from both our local Women's Health service and from the published literature in New Zealand and internationally has shown that currently health professionals are not well supported after a critical incident. This can affect health professionals' emotional wellbeing. It is not clear what the best support to provide is. This study is using an action research approach which means the participants and the researcher work together to design the outcome, in this case a support package to use after a critical incident. As part of the stakeholder group you will be able to provide interpretation of the themes developed in the reconnaissance phase from a leadership and senior clinician perspective. The findings of the study will be shared with the leadership team of Women's Health and published to promote improved support for health professional wellbeing.

Completing the study will also enable me to gain a Doctorate in Health Science.

How will my privacy be protected?

No names will be associated with the recorded meetings, transcriptions or in the final report. The information shared will be stored in a secure storage area. Limited confidentiality only can be guaranteed as another member of the service may be able to recognise your comment used in the report. You will be given an opportunity to review the transcripts for accuracy and remove any part of the transcript if required.

What are the costs of participating in this research?

It may be possible to meet during work time or it may require you to meet outside these times. Parking costs can be reimbursed.

What opportunity do I have to consider this invitation?

I would appreciate it if you could advise me whether you consent to being part of the study in 2 weeks by phoning or emailing me.

How do I agree to participate in this research?

Once you agree to participate you will be required to complete a Consent Form which I will provide to you at the time we organise the meeting date.

Will I receive feedback on the results of this research?

A summary of the findings of the study will be provided to you and potentially you will be able to use the support package developed or other strategies recommended from the study.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Liz Smythe, liz.smythe@aut.ac.nz, 021351005

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

If you would like further information please contact me;
Diana Austin
Mobile 021492321
Email daustin@aut.ac.nz

Project Supervisor Contact Details:

Dr Liz Smythe
Mobile 021351005
Email liz.smythe@aut.ac.nz

Dr Jennie Swann
Mobile 021753025
Email jennie.swann@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 16 October 2014,

AUTEK Reference number 14/319.

ADHB Research Office A+6525

Consent Form

Action research participant



Project title: Facilitating health professional wellbeing following involvement in a critical incident

Project Supervisor: Dr Liz Smythe, Dr Jennie Swann

Researcher: Diana Austin

- I have read and understood the information provided about this research project in the Information Sheet dated 23 September 2014.
- I have had an opportunity to ask questions and to have them answered.
- I understand that identity of my fellow participants and our discussions in the action research group is confidential to the group and I agree to keep this information confidential.
- I understand that notes will be taken during the group discussion and that it will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that while it may not be possible to destroy all records of the group discussion of which I was part, the relevant information about myself including tapes and transcripts, or parts thereof, will not be used.
- I agree to take part in this research.
- I wish to receive a copy of the report from the research (please tick one): Yes No

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Participant's signature:

Participant's name:

Participant's Contact Details (email and / or phone number):

.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 16th October 2014

AUTEC Reference number 14/319

ADHB Research Office A+6525

Note: The Participant should retain a copy of this form.

2014

Information Sheet Stakeholder Group Participant



Date Information Sheet Produced:

23 September 2014, Amended 16 March 2015

Project Title

Facilitating health professional wellbeing following involvement in a critical incident

An Invitation

My name is Diana Austin. I am undertaking a research project to explore and develop a support package for health professionals following a critical incident, as part of my Doctorate in Health Science. I am a midwifery lecturer at AUT and employed as a midwife on the bureau at Auckland District Health Board (ADHB).

I would like to invite you to take part in this research as a member of the stakeholder group. You are being asked as you are part of the ADHB Women's Health leadership team. Participation is voluntary, please read the following information about the study and what is involved to assist in deciding whether you would want to be involved.

What is the purpose of this research?

Support for health professionals following a critical incident within Women's Health at ADHB has been identified as a gap. It is known that being involved in critical incidents can be traumatic and that support is important at this time. The purpose of the study is to explore, develop and evaluate a support package alongside health professionals who work in the service. The findings from the study will provide some guidance on how best to provide support within Women's Health. The final report will be provided to the service as well as being published and presented at relevant conferences. The completion of the study will enable me to complete a Doctorate in Health Science.

How was I identified and why am I being invited to participate in this research?

As stated above you are being invited to participate in the research as you are part of the leadership team working in Women's Health. Your expertise as leaders is recognised as being valuable to the research. Your role will be to take part in a discussion group or 'action group' that reviews the information obtained from interviews with health professionals and how it could inform a support package.

What will happen in this research?

The study will use Technical Action Research as the methodology. Action research involves a series of cycles. Each cycle consists of planning, acting, observing and reflecting which then leads on to another cycle with the same steps, resulting in improvement or a specific outcome. For this study an initial cycle, called the reconnaissance was used. In this cycle 8 participants were recruited, representing each of the professional groups in Women's Health. I met with each of the participants individually to listen to their stories following questions such as; "tell me

about a time when you were involved in a critical incident", "what helped you through this experience?" The themes from these stories are being used to help develop a support package.

The themes will then be presented to a stakeholder group and a representative group of health professionals working clinically, who together will form the action research group. The meetings where the findings of the reconnaissance phase are presented and discussed would be recorded and transcribed. Participants would also have the opportunity to meet with the researcher individually. The information from these meetings would be used to inform the development of a support package, as part of the action research cycle.

What are the discomforts and risks?

The discussion of critical incidents can be distressing. It can bring unresolved trauma to the surface. If an issue has been raised that you would like to talk more about support is available via Counselling Services at AUT.

Contact details

AUT: contact the centres in person, or by phone 09 921 9992 for City campus (WB219) and South Campus (MB reception) or 09 921 9998 North Shore Campus (AS104) to make an appointment.

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Under the Health Practitioners Competence Assurance Act 2003 all health practitioners have a responsibility to protect patients from risk and report individuals where there is a concern about competence. This study is not exempt from the Act. You are reminded that you do not need to share information unless you are comfortable doing so.

What are the benefits?

The evidence from both our local Women's Health service and from the published literature in New Zealand and internationally has shown that currently health professionals are not well supported after a critical incident. This can affect health professionals' emotional wellbeing. It is not clear what the best support to provide is. This study is using an action research approach which means the participants and the researcher work together to design the outcome, in this case a support package to use after a critical incident. As part of the stakeholder group you will be able to provide interpretation of the themes developed in the reconnaissance phase from a leadership and senior clinician perspective. The findings of the study will be shared with the leadership team of Women's Health and published to promote improved support for health professional wellbeing.

Completing the study will also enable me to gain a Doctorate in Health Science.

How will my privacy be protected?

No names will be associated with the recorded meeting, transcriptions or in the final report. The information shared will be stored in a secure storage area. Limited confidentiality only can be guaranteed as another member of the service may be able to recognise your comment used in the report. You will be given an opportunity to review the transcripts for accuracy and remove any part of the transcript if required.

What are the costs of participating in this research?

It may be possible to include the discussion in one of the current meetings or an additional meeting may need to be organised. It is anticipated this will occur in your normal working day.

What opportunity do I have to consider this invitation?

I would appreciate it if you could advise me whether you consent to being part of the study in 2 weeks by phoning or emailing me.

How do I agree to participate in this research?

Once you agree to participate you will be required to complete a Consent Form which I will provide to you at the time we organise the meeting date.

Will I receive feedback on the results of this research?

A summary of the findings of the study will be provided to you and potentially you will be able to use the support package developed or other strategies recommended from the study.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Liz Smythe, liz.smythe@aut.ac.nz, 021351005

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

If you would like further information please contact me;
Diana Austin
Mobile 021492321
Email daustin@aut.ac.nz

Project Supervisor Contact Details:

Dr Liz Smythe
Mobile 021351005
Email liz.smythe@aut.ac.nz

Dr Jennie Swann
Mobile 021753025
Email jennie.swann@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 16 October 2014,

AUTEK Reference number 14/319

ADHB Research Office A+0325

Consent Form

Stakeholder group participant



Project title: Facilitating health professional wellbeing following involvement in a critical incident

Project Supervisor: Dr Liz Smythe, Dr Jennie Swann

Researcher: Diana Austin

- I have read and understood the information provided about this research project in the Information Sheet dated 23 September 2014 (amended 16 March 2015).
- I have had an opportunity to ask questions and to have them answered.
- I understand that identity of my fellow participants and our discussions in the stakeholder group is confidential to the group and I agree to keep this information confidential.
- I understand that notes will be taken during the group discussion and that it will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that while it may not be possible to destroy all records of the stakeholder group discussion of which I was part, the relevant information about myself including tapes and transcripts, or parts thereof, will not be used.
- I agree to take part in this research.
- I wish to receive a copy of the report from the research (please tick one): Yes No

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Participant's signature:

Participant's name:

Participant's Contact Details (email and / or phone number):

.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 16th October 2014

AUTEC Reference number 14/319

ADHB Research Office A+6525

Note: The Participant should retain a copy of this form.

Information Sheet

Action Research Participant



Date Information Sheet Produced:

23 September 2014 (Revised July 2015)

Project Title

Facilitating health professional wellbeing following involvement in a critical incident

An Invitation

My name is Diana Austin. I am undertaking a research project to explore and develop a support package for health professionals following a critical incident, as part of my Doctorate in Health Science. I am employed on the midwifery bureau at Auckland District Health Board (ADHB) and a midwifery lecturer at AUT.

I would like to invite you to take part in this research as a member of an **action research group**, a group that includes a representation of health professionals who work in direct contact with women and their families. The purpose of this group is to work with the researcher in developing a support package, using the data collected in the previous stage of the research. This may also include the sharing of your own stories as part of the package. Participation is voluntary, please read the following information about the study and what is involved to assist in deciding whether you would want to be involved.

What is the purpose of this research?

Support for health professionals following a critical incident within Women's Health at ADHB has been identified as a gap. It is known that being involved in critical incidents can be traumatic and that support is important at this time. The purpose of the study is to explore, develop and evaluate a support package alongside health professionals who work in the service. The findings from the study will provide some guidance on how best to provide support within Women's Health. The final report will be provided to the service as well as being published and presented at relevant conferences. The completion of the study will enable me to complete a Doctorate in Health Science.

How was I identified and why am I being invited to participate in this research?

You are being invited to participate as you are a health professional working directly with women and their families. As such you are in the best place to provide guidance on how a support package could be developed that is relevant to the work situation. You have been identified as able to provide content for the support package in the form of expert knowledge and stories about your own experiences that could be shared with others. Your role will also be to take part in a discussion group or 'action group' that reviews the support package.

What will happen in this research?

The study will use Technical Action Research as the methodology. Action research involves a series of cycles. Each cycle consists of planning, acting, observing and reflecting which then

2014 Action research participant

leads on to another cycle with the same steps, resulting in improvement or a specific outcome. For this study an initial cycle, called the reconnaissance was used. In this cycle 8 participants were recruited, representing each of the professional groups in Women's Health. I met with each of the participants individually to listen to their stories following questions such as; "tell me about a time when you were involved in a critical incident", "what helped you through this experience?" The themes from these stories have been used to help develop a support package.

The themes have been presented to a working group of key stakeholders. They are also going to be presented to a group of health professionals (which you are invited to be part of) working clinically, who together will form the action research group. I would like you to consider being part of the representative group of health professionals who can work with the researcher to develop a support package. Due to the nature of the workforce meeting as a group may not be possible so the themes from the previous cycle will be shared with you individually or in small groups. These discussions or small meetings would be recorded and transcribed. The outcome of the meeting with the stakeholder group indicated that the sharing of personal stories would be beneficial to include in the support package. The stories could be videoed where you are identified or transcribed and presented anonymously. I would like to invite you to provide a narrative relevant to support following a critical incident

What are the discomforts and risks?

The discussion of critical incidents can be distressing. It can bring unresolved trauma to the surface. If an issue has been raised that you would like to talk more about support is available via Counselling Services at AUT.

Contact details

AUT: contact the centres in person, or by phone 09 921 9992 for City campus (WB219) and South Campus (MB reception) or 09 921 9998 North Shore Campus (AS104) to make an appointment.

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Under the Health Practitioners Competence Assurance Act 2003 all health practitioners have a responsibility to protect patients from risk and report individuals where there is a concern about competence. This study is not exempt from the Act. You are reminded that you do not need to share information unless you are comfortable doing so.

What are the benefits?

The evidence from both our local Women's Health service and from the published literature in New Zealand and internationally has shown that currently health professionals are not well supported after a critical incident. This can affect health professionals' emotional wellbeing. It is not clear what the best support to provide is. This study is using an action research approach which means the participants and the researcher work together to design the outcome, in this case a support package to use after a critical incident. As part of the stakeholder group you will be able to provide interpretation of the themes developed in the reconnaissance phase from a leadership and senior clinician perspective. The findings of the study will be shared with the leadership team of Women's Health and published to promote improved support for health professional wellbeing.

Completing the study will also enable me to gain a Doctorate in Health Science.

How will my privacy be protected?

No names will be associated with the recorded meetings, transcriptions or in the final report. The information shared will be stored in a secure storage area. Limited confidentiality only can be guaranteed as another member of the service may be able to recognise your comment used

in the report. You will be given an opportunity to review the transcripts for accuracy and remove any part of the transcript if required. The contribution of a personal story to be included as part of the support package will be identifiable if specific consent has been provided for this to occur.

What are the costs of participating in this research?

It may be possible to meet during work time or it may require you to meet outside these times. Parking costs can be reimbursed.

What opportunity do I have to consider this invitation?

I would appreciate it if you could advise me whether you consent to being part of the study in 2 weeks by phoning or emailing me.

How do I agree to participate in this research?

Once you agree to participate you will be required to complete a Consent Form which I will provide to you at the time we organise the meeting date.

Will I receive feedback on the results of this research?

A summary of the findings of the study will be provided to you and potentially you will be able to use the support package developed or other strategies recommended from the study.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Liz Smythe, liz.smythe@aut.ac.nz, 021351005

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

If you would like further information please contact me;
Diana Austin
Mobile 021492321
Email daustin@aut.ac.nz

Project Supervisor Contact Details:

Dr Liz Smythe
Mobile 021351005
Email liz.smythe@aut.ac.nz

Dr Jennie Swann
Mobile 021753025
Email jennie.swann@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 16 October 2014,

AUTEK Reference number 14/319.

ADHB Research Office A*0525

2014 Action research participant

Consent Form

Action Research Participant



Project title: Facilitating health professional wellbeing following involvement in a critical incident

Project Supervisor: Dr Liz Smythe, Dr Jennie Swann

Researcher: Diana Austin

- I have read and understood the information provided about this research project in the Information Sheet dated 23 September 2014 (revised July 2015).
- I have had an opportunity to ask questions and to have them answered.
- I have agreed to provide a narrative of a critical incident experience of my choosing (please read the following carefully and select your chosen option)
 - I agree to be video/audio recorded and my identity to be known by anyone who has access
 - I agree to be video recorded and my identity to be known by those who have access within ADHB only
 - I agree to provide a story but it is to be anonymous
- I understand that notes will be taken during meetings and that they will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- I agree to take part in this research.
- I wish to receive a copy of the report from the research (please tick one): Yes No

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Participant's signature:

Participant's name:

Participant's Contact Details: (email and / or phone number)

.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 16th October 2014

AUTEC Reference number 14/319

ADHB Research Office A+6525

Note: The Participant should retain a copy of this form.

Information Sheet

Interview Participant – Evaluation



Date Information Sheet Produced:

23 September 2014 (revised 2 December 2015)

Project Title

Facilitating health professional wellbeing following involvement in a critical incident.

An Invitation

My name is Diana Austin. I am undertaking a research project to explore and develop a support package for health professionals following a critical incident, as part of my Doctorate in Health Science. I am a midwifery lecturer at AUT and employed as a midwife on the bureau at Auckland District Health Board (ADHB).

I would like to invite you to take part in evaluating an eBook resource that has been developed as a support tool for health professionals. This will involve you interacting with the electronic resource in a session that will take approximately 60 - 90 minutes. Participation is voluntary, please read the following information about the study and what is involved to assist in deciding whether you would want to be involved.

What is the purpose of this research?

Support for health professionals following a critical incident within Women's Health at ADHB has been identified as a gap. It is known that being involved in critical incidents can be traumatic and that support is important at this time. The purpose of the study is to explore, develop and evaluate a support package alongside health professionals who work in the service. The findings from the study will hopefully provide some guidance on how best to provide support within Women's Health. The final report will be provided to the service as well as being published and presented at relevant conferences. The completion of the study will enable me to complete a Doctorate in Health Science.

How was I identified and why am I being invited to participate in this research?

You are being invited to be part of the research as you have indicated an interest following advertising within Women's Health at ADHB. You have also identified that you have been involved in an incident that you perceive as critical within the last two years. The study requires a representative sample of health professionals.

What will happen in this research?

The study is using Action Research as the methodology. Action research involves a series of cycles. Each cycle consists of planning, acting, observing and reflecting which then leads on to another cycle with the same steps, resulting in improvement or a specific outcome. An initial cycle involved interviewing 8 participants representing each of the professional groups in Women's Health. Analysis of the interviews identified areas of support that was needed. The themes were presented to a key group within Women's Health. An interactive eBook has been developed that incorporated information relating to the identified needs. The researcher, in collaboration with the key group, has agreed that the eBook should be evaluated with potential users. The chosen method to do this is called 'Thinking Aloud'. This technique requires the

Interview participant 2014

participant to use the eBook and talk aloud about what they are thinking. It is a form of usability testing and each session will take approximately 1 – ½ hours. The information will be recorded and notes taken by the researcher. You will be given a copy of the transcription for verification that the information is correct. The information will be anonymised during the analysis and kept confidential. Excerpts from the thinking aloud session may be used in the presentation to the key group to assist with development.

What are the discomforts and risks?

The discussion of critical incidents can be distressing. It can bring unresolved trauma to the surface. The eBook is aimed to improve the support following a critical incident however it has not yet been evaluated. There is the potential that it may not be helpful and increase the feeling of distress. If an issue is raised that you would like to talk more about support is available via Counselling Services at AUT.

Contact details

AUT: contact the centres in person, or by phone 09 921 9992 for City campus (WB219) and South Campus (MB reception) or 09 921 9998 North Shore Campus (AS104) to make an appointment.

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Under the Health Practitioners Competence Assurance Act 2003 all health practitioners have a responsibility to protect patients from risk and report individuals where there is a concern about competence. This study is not exempt from the Act. You are reminded that you do not need to answer questions or share information unless you are comfortable doing so. The study is focusing around the positive aspects of support and what works well.

What are the benefits?

The evidence from both our local Women's Health service and from the published literature in New Zealand and internationally has shown that currently health professionals are not well supported after a critical incident. This can affect health professionals' emotional wellbeing. It is not clear what the best support to provide is. This study is using an action research approach which means the participants and the researcher work together to design the outcome, in this case a support package to use after a critical incident. As a participant you will be able to contribute to the evaluation of the tool that will help the service decide if and how it could be implemented. The findings of the study will be shared with the leadership team of Women's Health and published to promote improved support for health professional wellbeing.

Completing the study will also enable me to gain a Doctorate in Health Science.

How will my privacy be protected?

No names will be associated with the taped interviews, transcriptions or in the final report. The information shared will be stored in a secure storage area. Limited confidentiality only can be guaranteed as another health professional may be able to recognise your comment used in the report to support a theme. Interviews will be offered offsite to minimise your association with the study and potential identification. You will be given an opportunity to review the transcripts prior to any content or themes being shared and remove any part of the transcript.

What are the costs of participating in this research?

Participating in the interviews may require you to meet with me in your own time. Each interview will take approximately 1-1.5 hours. Additional costs created by this such as travelling or parking will be accommodated.

What opportunity do I have to consider this invitation?

I would appreciate it if you could advise me whether you consent to being part of the study in 2 weeks by phoning or emailing me.

How do I agree to participate in this research?

Once you agree to participate you will be required to complete a Consent Form which I will provide to you at the time we organise the date for our interview.

Will I receive feedback on the results of this research?

A summary of the findings of the study will be provided to you and potentially you will be able to use the support package developed or other strategies recommended from the study.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Liz Smythe, liz.smythe@aut.ac.nz, 021351005

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

If you would like further information please contact me;
Diana Austin
Mobile 021492321
Email daustin@aut.ac.nz

Project Supervisor Contact Details:

Dr Liz Smythe
Mobile 021351005
Email liz.smythe@aut.ac.nz

Dr Jennie Swann
Mobile 021753025
Email jennie.swann@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 16 October 2014,

AUTEK Reference number 14/319.

ADHB Research Office A+0525

Consent Form

Interview Participant



Project title: Facilitating health professional wellbeing following involvement in a critical incident

Project Supervisor: Dr Liz Smythe, Dr Jennie Swann

Researcher: Diana Austin

- I have read and understood the information provided about this research project in the Information Sheet dated 23 September 2014 (revised 2 December 2015).
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- I agree to take part in this research.
- I wish to receive a copy of the report from the research (please tick one): Yes No

If you require Māori cultural support talk to your whānau in the first instance. Alternatively you may contact the administrator for He Kamaka Waiora (Māori Health Team) by telephoning 09 486 8324 ext 2324

Participant's Signature:.....

Participant's Name:.....

Participant's Contact Details: (email and / or phone number)

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.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 16th October 2014

AUTEC Reference number 14/319

ADHB Research Office A+6525

Note: The Participant should retain a copy of this form.

Appendix D: Glossary

- **3M** - Health Information System, commonly referred to as the patient's clinical record or notes.
- **Auckland District Health Board (ADHB)** - A District Health Board is responsible for providing health care to the people in its geographical area. ADHB provides health care services for people in the Auckland area. National Women's Health is one of those services.
- **Auckland University of Technology (AUT)** - A New Zealand University where the researcher has undertaken the Doctoral study and is employed as midwifery lecturer.
- **Clinician** – Another term used to describe a Health Professional (as defined below), who provides care directly to the woman and her baby.
- **Code** – When an emergency situation is serious and requires the immediate support of a team of health professionals or in the case of a threat to safety, security personnel. Making the request for immediate help is labelled as calling a *code*.
- **Critical Incident Stress Management (CISM)** – Support strategy that includes defusing and debriefing strategies, designed to help recovery after a traumatic event. It is the management outlined in the ADHB policy and incorporates the term Critical Incident Stress Debriefing (CISD).
- **Employment Assistant Programme (EAP)** – A service that provides counselling and debriefing for staff employed at Auckland District Health Board, including following a critical incident and other difficult situations.
- **Health Professional** - Term used to encompass all practitioners with a clinical qualification working in any health setting such as community, clinic or hospital and either employed or self-employed. The multidisciplinary groups included in this study are allied health, medical, midwifery and nursing.
- **Lead Maternity Carer (LMC)** - A doctor or midwife who provides maternity care for women while pregnant, during labour and birth and for 4 – 6 weeks after their baby is born. Women can choose who provides their maternity care (Ministry of

Health, 2016a). In this study it is used to refer to midwives or doctors who are self-employed in this role.

- **National Women's Health (NWH)** - The service within Auckland District Health Board where the study took place. It includes services for fertility, gynaecology, maternity, and newborn for the central Auckland area and as a referral centre for New Zealand.
- **Orderly** – A person employed by the District Health Board to provide non-clinical services. At ADHB this commonly involved the transportation of patients, equipment and medication, including in emergency situations. May also be referred to as a health care assistant.
- **Root Cause Analysis (RCA)** - Method of investigation that aims to identify the root cause of a problem so that it can be addressed to prevent similar events occurring in the future.
- **Rapid Multidisciplinary Panel (RAMP)** - A localised process for National Women's Health developed to review critical incidents that are not required to have a resource intensive RCA undertaken.
- **Staff** - Employees of the District Health Board. They may be administrators, auxiliary, health professionals or management personnel.

Appendix E: Transcriptionists Confidentiality Agreements

22 September 2014

page 1 of 1

Confidentiality Agreement



For someone transcribing data, e.g. audio-tapes of interviews.

Project title: Facilitating health professional wellbeing following involvement in a critical incident

Project Supervisor: Dr Liz Smythe

Researcher: Diana Austin

- I understand that all the material I will be asked to transcribe is confidential.
- I understand that the contents of the tapes or recordings can only be discussed with the researchers.
- I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber's signature: Anita Austin

Transcriber's name: Anita Austin

Transcriber's Contact Details (if appropriate):

(09) 5233387 02102517174
musicalaustina@gmail.com

Date: 22-9-14

Project Supervisor's Contact Details (if appropriate):

liz.smythe@aut.ac.nz

021 351 005

Approved by the Auckland University of Technology Ethics Committee on type the date on which the final approval was granted AUTEK Reference number type the AUTEK reference number

Note: The Transcriber should retain a copy of this form.

This version was last edited on 8 November 2013

Confidentiality Agreement

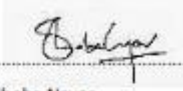
For someone transcribing data, e.g. audio-tapes of interviews.

Project title: Facilitating health professional wellbeing following involvement in a critical incident

Project Supervisor: Professor Liz Smythe

Researcher: Diana Austin

- I understand that all the material I will be asked to transcribe is confidential.
- I understand that the contents of the tapes or recordings can only be discussed with the researchers.
- I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber's signature: 

Transcriber's name:Shoba Nayar.....

Transcriber's Contact Details (if appropriate):

Email: snayar19@gmail.com.....

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.....

Date: 16 February 2016

Project Supervisor's Contact Details (if appropriate):

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.....

.....

Approved by the Auckland University of Technology Ethics Committee on type the date on which the final approval was granted AUTEK Reference number type the AUTEK reference number

Note: The Transcriber should retain a copy of this form.

Appendix F: eBook resource

<http://nationalwomenshealth.adhb.govt.nz/health-professionals/critical-incident-e-book>



Critical Incidents

Support Tool for Health Professionals

This eBook was created as part of an action research doctoral study by Diana Austin. She worked collaboratively with the Health Professionals in Women's Health at Auckland District Health Board.

The stories and quotes are from a range of health professionals; allied health, lead maternity carers, medical, midwifery, and nursing...



AUT

CRITICAL INCIDENTS
WHAT DO YOU NEED AT THE MOMENT?
Click on the relevant box

- ① *I feel really upset after what happened. Everyone else seems to be coping better.*
- ② *I have been asked to meet with those involved in the incident. What does this involve?*
- ③ *I need to talk to someone. What are my options?*
- ④ *I am worried I did something wrong.*
- ⑤ *How should I talk to the woman and her family?*
- ⑥ *I don't feel competent to practice anymore.*
- ⑦ *The incident is being investigated. What will happen?*
- ⑧ *A colleague has been involved in an incident. How can I help them?*
- ⑨ *I am the most senior person on duty. How do I help my team members?*
- ⑩ *I am a manager and one of my team is involved in a critical incident. What advice & support should I provide?*



EMOTIONAL EFFECT OF CRITICAL INCIDENTS

Emotional trauma after a critical incident is common and most likely others are hiding the same feelings you have. Listen to others share how they have felt after a critical incident.



You come to work with a focus on new life, not death and morbidity.

Second Victim

The first victim being the woman and her family, the term 'second victim' has been used to describe the health professional's feeling of despair following the realisation that they were involved in an error, the feeling of isolation and the often unsupportive response by colleagues and the health system.

As a health professional you can manage the majority of experiences in practice. However there may be an event that triggers a significant response or a series of events that eventually leads you to feel there has been one too many.

Local and international studies show that it is common for people to

- ▶ Worry about making a mistake
- ▶ Be emotionally affected when there is a bad outcome for a woman or her baby
- ▶ Feel responsible for that outcome
- ▶ Be concerned about what their team members think of them
- ▶ Consider resigning after a bad outcome
- ▶ Be afraid to talk to their colleagues
- ▶ Believe they are the only ones that feel this way

Health professionals often do not talk about how they feel after a critical incident or about the errors they may have made. This may have led you to think you are the only one affected by such events.

"I don't know if maybe I'm a private person when it comes to stuff like that. I don't really go around telling people about it, that I just cried last night ... that it affected me as much. I didn't really tell many people until months later when it was ok."
'Women's Health professional'

Listen to stories from senior health professionals in Women's Health on the next page



STORIES



Incidents, adverse events and errors happen to all health professionals at some point in their career.

...and people quite often look quite surprised when I'm prepared to say, well these are the bad things that have happened to me and this is what I was going to do about them, including resign. And actually everyone's had something but if no-one tells you about it ... 'Women's Health professional'

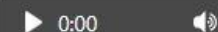
If you want to share your story or talk about how you are feeling click [here](#) to go to the section on "How to share your story"

Listen to some of our senior health professionals share their stories of when things did not go as planned and how it affected them

LISTEN TO STORY FROM **ALENA**
WOMEN'S HEALTH REGISTRAR



LISTEN TO STORY FROM **CARLY**
SELF EMPLOYED MIDWIFE



LISTEN TO STORY FROM **DIANA**
RESEARCHER & MIDWIFE





GATHERING TOGETHER

There may be an initial get together after an event, followed by a more formal meeting. Find out how these can be beneficial.



Getting together to discuss the event

An initial get together immediately after an event can be helpful for colleagues to talk about how they are feeling and check everyone is OK. This is when you may be surprised by how many other people are affected. It can be called an 'emotional huddle' or defusing.

Debriefing

Discussing a poor outcome with others involved can be beneficial to understand more clearly what happened, how your colleagues are feeling and what can be learnt. This is usually best done when people have had an opportunity to rest and organised at a time that suits everyone. However it is important that it is facilitated well and you are not forced to come if you don't want to.

"I just remember feeling that because the meeting was happening it kind of validated for me that this was a huge event. Like all these other people were worried and needing a debrief. That the meeting wasn't about me." (Women's Health professional)

Debriefing – what does the research say?

There is some evidence that debriefing intensifies the negative effects of an event, with more severe stressors leading to more severe responses. For those that are going to develop post traumatic distress after an event the debriefing is unlikely to prevent that occurring. Despite this people may find it helpful to gather together to discuss the event. To feel supported is important.

What makes people feel supported from debriefing are the following;

- ▶ Supportive attitude of the facilitator
- ▶ Accessibility i.e. at a time can attend
- ▶ Systems approach that does not single out individuals
- ▶ Confidentiality

(See reference page for articles on this topic and the ADHB policy Critical Incident Stress Management')

If you want to get together after an event, either immediately or later to debrief ask a senior person to organise (e.g. On-call Consultant, Clinical Leader, Clinical Midwife Advisor, Charge Nurse or Midwife or Primary Maternity Service Clinical Director).
If you feel it is needed, most likely others do too.



PEOPLE YOU CAN TALK TO

You may feel comfortable talking with a colleague, senior clinical person or manager. However, often you may want someone external to the incident or your service. There are other people you can talk with.



*'It's normal to be rocked by something like this'
(Women's Health professional)*

You may be wondering if there is anyone you can talk to. Keeping quiet often feels like the safest thing to do. This is the case in many healthcare organisations. ADHB Women's Health service is trying to improve the support provided to the health professionals working here.

Talking about an incident can help clarify for you what happened, provide you with emotional support and reassurance and when you are ready an opportunity to reflect on what you could improve. Needing

to talk is not a sign of weakness or something new to the 21st Century. Rather the way we work has changed. If you talk to anyone who has been around a while they will tell you stories of chatting in the tearoom, telling stories while knitting on a quiet night. Economic restraints and higher acuity means most people are running from one situation to the next most of the time.

*'Sharing with non-judgemental colleagues was reported to ease the emotional burden...'
(Ullstrom, 2014, p. 329).*

How do I know I need to talk to someone?

Just wanting to is a good enough reason.

You may also

- ▶ Need some emotional support
- ▶ Be worried about the care you provided
- ▶ How you want to reflect on how you could improve
- ▶ Find out if others have had similar experiences

If you have any of the following you should seek professional help.

- ▶ Thinking about the incident each day for weeks following the event and criticising yourself for things you may have done
- ▶ Negative feelings and distressful emotions about the event stay the same or increase in intensity
- ▶ There is a need to continue using sleeping medications, and/or using other drugs and alcohol to feel better
- ▶ Continuing to lack confidence in an area of work where you previously felt comfortable
- ▶ Continuing difficulty to sleep due to intrusive thoughts, nightmares or flashback*Continue*



Chapter 3

....continued from previous page

- ▶ Ongoing change in concentration or attention such as having to re-read clinical material several times, or not being able to concentrate on a T.V. program or book at home
- ▶ Other signs that indicate you may have increased central nervous system functioning i.e. anxiety, panic, reactivity to a colleagues questions or work situations, feeling less in control of your emotions over-all
- ▶ Developing ways to avoid the things that remind you of the trauma
- ▶ Feeling emotionally flat or down (for several weeks) and withdrawing from others

PEOPLE YOU CAN TALK TO - CONTACTS

Having other major stresses happening in your life e.g. unsafe relationship, money, family or personal health concerns can overload you emotionally. Consider a session with a skilled professional to help work through the additional stress the critical incident has created.

Not everyone is a good listener. You will already know that. Just because a person is in a leadership or senior position does not mean that they will be the best person for you to talk to. There are colleagues around you though who want to be supportive and listen to your story and support you move forward. They are not always the people you expect. Some ideas for finding that person;

- ▶ Test out colleagues with a safe story to see how they respond
- ▶ Contact your mentor, supervisor or manager for advice
- ▶ Look outside your own professional group
- ▶ After hours consider the Clinical Midwife Advisor, On call Consultant or Duty Manager

- ▶ Once you have shared your story be that person who is willing to support others, make yourself known

Sometimes the best person to contact is external to the service or healthcare organisation. When seeking a professional person to talk to you want to find someone with the following characteristics:

- ▶ Educated within the area of work place trauma
- ▶ Non-judgemental
- ▶ Has good listening skills
- ▶ Can provide individual support while viewing the incident at a systemic level
- ▶ Has sufficient time to assist staff experiencing trauma

If you want to go external to Women's Health

EAP (Employee Assistance Programme) provided by EAPworks

- ▶ EAPworks has a specialist clinical psychologist available who is able to provide 1:1 free sessions
- ▶ EAP are also able to provide facilitators for debriefing, and employees can have 3 sessions personal EAP follow-up
- ▶ Contact 0800 SELF HELP or 0800 735 343
- ▶ EAPworks APP Free download. Provides self help resources, emergency contacts and information about making appointments.
- ▶ Resource book for managers available

Futher external contact on the next page

'...research has discussed the perfectionism expected of healthcare professionals. Consequently, staff may be reluctant to speak openly and seek help after an adverse event for fear of being stigmatised' (Ullstrom, 2014, p. 330)



PEOPLE YOU CAN TALK TO - CONTACTS

Midwifery

New Zealand College of Midwives – Auckland

- ▶ Three free counselling sessions for two midwives are available each month for [NZCOM](#) members
- ▶ Unexpected Outcomes – Information for Midwives available on the New Zealand College of Midwives website

Medical

- ▶ <https://www.mcnz.org.nz/support-for-doctors>
- ▶ New Zealand Resident Doctors Association
- ▶ Medical Protection Society

Members are supported through difficult practice issues such as complaints, and investigations.

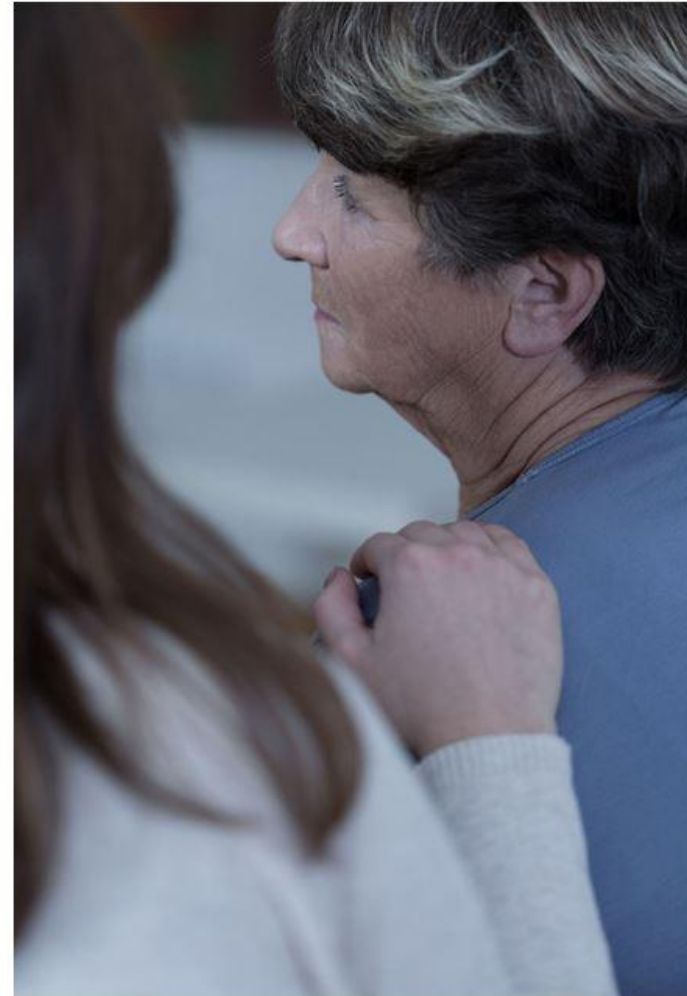
Nursing

Nurses needing additional information, advice and support can contact the [New Zealand Nurses Organisation](#). The following two resources for debriefing and reviews may be useful.

- ▶ [Serious and sentinel events](#)
- ▶ NZNO Practice Guidelines: Incident Debriefing

Social work

Aotearoa New Zealand Association of Social Workers [ANZASW](#) will support members through complaints and investigations.





MAKING MISTAKES

Most health professionals are worried about making a mistake. In reality all health professionals make mistakes but we rarely talk about them. By reflecting on and sharing our mistakes we can facilitate learning.

We all make mistakes, some will cause harm and others will go unnoticed. A forgotten or missed antibiotic for one woman may have little effect but for another may mean admission to intensive care. 'To err is human' but this provides little comfort.

You may feel that you have made a mistake that has led to a bad outcome. You will probably feel physically and emotionally upset at the possibility.

You may also be thinking you had clear reasons why you made the decision you did and it is only after the poor outcome that it can be considered a mistake. Or you may realise that a mistake did happen but at the time you did the best that you could in the situation you were in. When you look back you will also be thinking of all the other things that were happening at the time. You were probably not looking after just one woman in an environment set up specifically for that woman. More likely you were juggling many different situations, caring for women with different needs, working with team members with varying temperaments and coping with your own personal situation at the time. That is the reality of healthcare. Predicting how your day will go and what will happen as the result of each decision or action you make is rarely possible.

Although you know this is the reality sometimes you will feel like the situation has been singled out and looked at in depth in isolation from all the other things that were going on at the same time. It is important for you to have the opportunity to explain what else was happening.

This is a key part to understanding the story of what happened and helps decide any learning for you and the service.

A New Zealand study exploring the meaning of being safe in practice among midwives, women and medical staff revealed "a world of practice that is often disordered, where the practitioner is caught up, trapped, and can only do what is possible at the time" (Smythe, 2003, p.203).





MAKING MISTAKES - REFLECTIVE LEARNING

What is reflective learning?

There are many definitions of reflection and reflective learning. The basic assumption in all of them is that you use your current experiences to embed good practice and improve the way you are in future situations. This process can help you move forward after a difficult situation.

Reflection is “a process of standing back from an experience and taking some time to analyse and carefully review it” (Budworth & Shihab Ghanem Al Hashemi, 2015, p.15).

There are models that can help you to reflect and learn from a situation. The Gibb’s model below is an example



Gibbs (1988)

You may be thinking that this all sounds good in theory but are scared that you will find something that could have been done better. In reality there is always something we could have done differently in hindsight. In a supportive environment or workplace you should be able to explore an incident as an individual or team to identify possible areas for improvement for future similar situations.

It is good to reflect initially on your own but it is also beneficial to discuss your thoughts with another person. Because you are affected by the emotion of the situation you can sometimes interpret a situation with some bias that leads to inaccurate assumptions. These could be in opposite ends of the spectrum, from thinking you should resign, to believing no change is required. Sometimes it can relate to decision making that requires someone more experienced to assist you interpret.

Following the reflective process it is important that you are accountable for your actions that may have caused harm to a woman. The section on Open Disclosure provides advice on talking with women and their families. Discuss with your manager and gain advice from your professional body if there has been serious harm.

[This document is helpful for all professional groups](#)

Remember that we can also learn a lot from things which went well. It can be useful to look at what you can learn from the things that went well and how they can be repeated in future.

“... I find that the juniors come to me quite often to ask if they’ve made the right decision or whether their decision making was flawed... I try to get them to tell me what the situation was and what it is that they think might be the wrong decision that they’ve made and then what made them make the decision that they chose and what would, now that they’ve thought it and been worrying about it what is it that they’ve been wanting to do differently and what was the different outcome that they were looking for” (Women’s Health professional)



TALKING WITH THE WOMAN – OPEN DISCLOSURE

It is important that we communicate well with a woman and her family after an incident. The senior person in the team should support you. There are key principles to follow when meeting with the family.

*Open disclosure, or open communication, refers to the timely and transparent approach to communicating with, engaging with and supporting consumers, their families and whanau when things go wrong.
(Health Quality & Safety Commission 2012)*

When you are already distressed about a serious incident or error occurring the thought of facing the woman and her family can feel like too much. A common mistake can be to blame another individual or express your own personal despair so the woman feels she needs to comfort you. Both of these scenarios can leave the family feeling angry. It is important that you ask a senior person to meet the woman with you.

The Ministry of Health provides a short online course on Open Disclosure that will provide you the key points on why open disclosure is important and how to have the conversation. See link or go to the [Health Quality & Safety Commission website](#).

The course covers:

Before – the right preparation

During – the right words and the right way

After – the right record keeping

It is important that following Open Disclosure that the woman has the contact details of the person who will be following her up, knows the plan and that the designated person follows up on the plan.

Continuing the relationship with the woman and her family continues the trust. At the same time you are receiving support to meet with a woman, you are also receiving support for yourself, you are more likely to feel valued in the team and more able to return to work.

“So often the best way to help yourself is to have people to help you help the patient” (ADHB senior health professional)

If you want more information the [Health and Disability Commission](#) provides clear expectations for Open Disclosure.

This should be viewed alongside the ADHB Reportable Events policy that includes how to disclose an adverse event to a patient.

Ask the woman and her family what they would find helpful. Consider cultural values such as Tikanga for Māori. Our Māori Midwifery Advisor provides some guidance. Listen [here](#)





CONTINUING TO PRACTICE

*A critical incident can lead you to doubt your ability to continue being a health professional. **Listen To Others** share how they have felt after a critical incident.*

Following an incident you may question whether you should continue to practice. This could be because

- ▶ You believe you contributed to the outcome
- ▶ You fear that you may be responsible
- ▶ You feel that your organisation blames you
- ▶ You feel overwhelmed by your emotions

These are common responses.

If you continue to feel this way it is important to [Talk to someone](#). Having someone validate you as an ongoing member of the team is important for you and for the ongoing functioning of the team. Validation does not mean you no longer need to reflect on what happened.

Resigning is rarely the best option for anyone. Sometimes taking time out will assist in this process. Many health professionals have identified a need to be removed from the work environment after a critical incident where there is space from the ongoing business of expecting to provide care as usual. This is a practical need but also silence or space is essential for [reflection](#).

One study identified that the most common characteristic stated of a support program was to have “an institutionally sanctioned respite away from the care environment immediately after an event to allow the second victim to compose him or herself before resuming patient care” (Scott, 2010, p. 235).

“I had a couple of weeks off work. Which I’d never done before or since. But it really affected me that case. And um I think it was a critical time of my career ...”
(Health Professional)





INVESTIGATION PROCESSES

Many serious events will be investigated to identify systems issues we can learn from. Find out what a RCA, RAMP or case review will involve.

Incidents with a serious outcome for the woman or her baby often need a formal investigation. The intent is to find out whether there are any aspects in the way we provide care (systems issues) that could be improved to decrease the likelihood of the event occurring again. It is not an adversarial process to blame an individual.

What events need reviewing?

There is a national scoring system that combines consequence (harm or potential harm) of an event and likelihood of it reoccurring.

[The matrix](#) includes types of events that may need to be reviewed e.g. unexpected death, retained swabs, fall, incorrect blood product. A severity assessment code (SAC) of 1 or 2 requires a formal investigation as outlined by the Ministry of Health. There are other events that the service may decide need reviewing as they provide the potential to identify areas for improvement. Others may be reviewed in response to [complaints](#) from consumers.

How are reviews done?

All review processes follow the same principles but vary in depth of analysis. The reviewers in investigations aim to clarify what happened. This is done by interviewing those involved, (either individually or as a group), reading the clinical record as much as possible, and getting feedback from the woman and family. As the environment we work in is complex and the event is being looked at in retrospect, the reviewers can often only establish a “best guess” about what actually happened. Using a particular review methodology the reviewers then identify what actions, changes in processes or patient factors may have contributed to



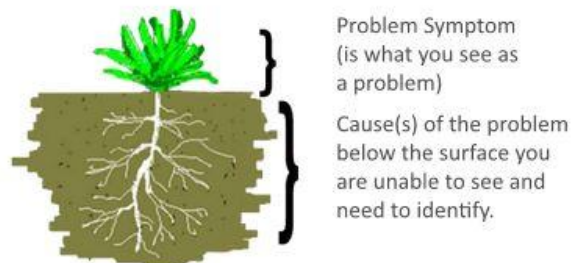
the event. Recommendations are developed to address the areas that need changing. Particular review types are outlined on the following page.

What to do if you find out an incident you were involved in is going to be reviewed?

- ▶ Remember that the review is to find system changes not individual blame
- ▶ Review the clinical file and make some notes of what else was happening at the time e.g. staffing, work load, environmental factors. Ask that they be accessible to you
- ▶ Discuss with your manager, senior clinician or for LMCs the Primary Maternity Service Clinical Director
- ▶ Ask someone to attend the meeting with you
- ▶ At the interview you will be asked some questions that may seem tough but this is to clarify what happened
- ▶ Offer your suggestions on how it may have been prevented
- ▶ Request to read any notes taken from the meeting for their accuracy, anything missed
- ▶ Ensure you have the name of a contact person if you have any further thoughts
- ▶ Ask for a copy of the final report. These reviews can take a long time so do not be surprised if it is some months. Ask the contact person for updates



INVESTIGATION PROCESSES - TYPES OF REVIEW



Types of review

ADHB uses all of the following types of review. There is a policy to guide when each type of review can be used.

► RCA (Root Cause Analysis)

This is a structured problem solving approach that attempts to identify the underlying root cause of an adverse event. The assumption is that if the root cause is corrected then the problem will not occur again.

The Ministry of Health has a [learning resource on how an RCA should be conducted](#).

► London Protocol - Systems Analysis of Clinical Incidents

A critique of the RCA methodology is that there is often not a single root cause for an outcome. Healthcare is complex and there may be many contributory factors relating to resources, fatigue, time pressures, policies etc. The aim of the review team using the [London Protocol](#), is to identify which of the contributory factors had the greatest impact on the critical incident.

► RAMP (Rapid Multidisciplinary Review Panel)

The above two methodologies are resource intensive and therefore not suitable to review all events. Women's Health have developed an

additional process to efficiently and effectively review events that are not as serious but have the potential for improving the service. A case review is prepared and a multidisciplinary team then review the process to identify system issues.

► Case reviews

A case review is less formal and usually involves a single senior health professional reviewing the clinical record and writing a short report. Sometimes this is undertaken to see if there are any system issues that would indicate a more formal, intensive review is required.

► HDC (Health & Disability Commission)

When the HDC receive a complaint from a consumer they will ask for feedback from the DHB. If a review has already been done it will be included in the response or the request may initiate a review, using any of the methodologies above. If you have been notified that the HDC is investigating a case ensure you talk to a senior team member and review the HDC process outlined on their [website](#).

► Complaints

The types of complaints received vary widely. Some require a phone call to the woman to resolve. Most commonly the health professional involved and their manager will be asked to provide a response. Less commonly the complaint may alert the service to a serious incident and a formal review will be undertaken.

► Regulatory Authority Review

Where there is a concern about competence the relevant regulatory authority may undertake a review with the aim of improving practice.

No matter what type of review, if you were the health professional involved in the event you should be informed that the review is happening and have the opportunity to provide input on what occurred and how it could be prevented from happening again.



RECEIVING A COMPLAINT

After receiving a complaint you might feel

- Shocked
- Angry
- Fearful of the outcome

Receiving a Complaint

Receiving a complaint about your practice can be particularly upsetting as it is directed personally at you. The distress to the woman and her family will not have been intended. Most people who make a formal complaint do so as they don't want others to go through the same experience. Complaints are often about communication.

A concern from a woman may come via

- ▶ Patient experience survey - All women who have provided an email address receive a satisfaction survey after discharge
- ▶ Complaint – A woman or her family / friends can write a letter, phone or tell a staff member aspects of care that they are not happy about. Where possible it is best that someone senior talks to the woman at the time of the concern to try to resolve it. If not a formal complaint is acknowledged by the consumer liaison department
- ▶ Health Professional Regulatory Authority e.g. Midwifery, Medical & Nursing Councils. A complaint may be made to your relevant regulatory authority; if the complaint is from a woman they will be required to forward it to the Health & Disability Commission
- ▶ HDC (Health & Disability Commission) - The HDC independently upholds consumer rights by: promotion and protection, resolving complaints, service monitoring and advocacy and education. Some women will make a complaint to ADHB and if not happy with the response forward to the HDC. Process [Guide](#)

What to do if you receive a complaint

- ▶ Acknowledge that it is normal to feel angry and upset
- ▶ Take time before you respond to the complaint
- ▶ Talk over the event with a senior colleague
- ▶ Allow yourself to go over the event, thinking about what happened from the woman's perspective
- ▶ Is there a possibility of misunderstanding in the situation?
- ▶ Could care have been provided differently?
- ▶ Were expectations different to what could be reasonably delivered?
- ▶ Seek advice from your professional organisation

Write the response acknowledging the woman or her family's concerns and provide the story from your perspective. If there were areas that could have been done better outline how changes will be made. Avoid being defensive. Ask someone to read your response before you send it to the person coordinating the response.





HELPING A COLLEAGUE

The attitude and comments of others can affect health professionals emotionally after an event as well as how they continue to function within the team. Find out what is helpful.

The way you respond to a colleague following a critical incident will have a significant impact on the way they are able to cope. Studies have found that health professionals are distressed not only by being involved in a serious event but also from the often unsupportive behaviours from those around them.

You may not have realised the impact your actions or inactions can have.

“Sharing with non-judgmental colleagues was reported to ease the emotional burden” (Scott, 2009, 329).



...and afterwards I like went through it with her and I said you know this is a scary thing ..., you’ve never been in that situation before and I just, tried to make her feel a little better about herself because I remember I felt so bad (Ms 6).

What your colleague needs you to do is to...

- ▶ Acknowledge that it is OK to be upset
- ▶ Ask how they are the next day, the next week and the next month
- ▶ Still value them as a team member (you are not agreeing or disagreeing with any actions)
- ▶ Be available to listen to their story
- ▶ Offer to go with them to any meeting / interview about the incident
- ▶ Advise them on the formal support services involved if they remain distressed

Do not...

- ▶ Be silent
- ▶ Avoid the person
- ▶ Dismiss the emotional impact
- ▶ Talk about what happened with other people – corridor gossip
- ▶ Provide false reassurance – e.g. say everything they did was great when you actually don’t know
- ▶ Make judgments about anyone’s actions

This information may be useful for family / friends to support you



Reflect on what you have found supportive in similar situations.

If you find it difficult to support another person due to your own grief consider accessing support for yourself to build your own emotional resilience.

“Nobody wanted to talk about it. I am not a touchy, feely person but I at least needed someone to make sure I was doing okay and I never felt like that. I felt like, ‘Well, this happens and you should be better about it and that’s it.’ There isn’t a single day that this doesn’t affect me (Scott, 2019, p. 329)”.

...Be that person that goes forward and says “are you OK?” and shows genuine concern



BEING THE MOST SENIOR PERSON PRESENT

There are important things that need to be done immediately after a critical incident and before people go home. The support provided can make a difference for those involved.

Do you have one of the following roles?

If so you have a responsibility to ensure the health professionals around you are supported at the time of an incident.

- ▶ Consultant on call
- ▶ Senior Registrar
- ▶ Clinical Midwife Advisor
- ▶ Midwife Specialist
- ▶ Duty Manager
- ▶ Most senior person present
- ▶ Primary Maternity Services Clinical Director – contact for LMCs

*“Its acknowledging that it doesn't matter what level you're at, everyone has the same feelings”
‘Women's Health professional’*

When a critical incident occurs you may hope a more senior person is around who can take on the responsibility of ensuring everyone is OK, however it may be you. Providing support at that time of an event can make a difference for the health professionals long-term. Ask other senior people around to assist.

Immediately after the event - Ensure the initial emotional first aid is provided. Organise an Emotional Huddle or meeting immediately after the event. Remember to include all involved. Health care assistants, theatre & allied health are sometimes left out and those on the periphery e.g. a student or administration staff.

- ▶ Ask how people are feeling
- ▶ Allow time to talk about what happened

- ▶ Avoid asking why it happened – that will happen at a later debrief or individually if required

Talking with the woman and her family

Ensure a senior person is involved in talking with the family, alongside the clinician involved. See Chapter 5 for guidance on how to have the conversation. Ensure a plan is made, documented and followed up.

Can the health professionals continue working?

- ▶ Check whether members of the team need to go home
- ▶ If so are they able to drive and will there be someone at home
- ▶ Does anyone who has already gone home need to be rung?

Who should I contact?

Who you call will depend on the type of the event and the effect it has had on individuals.

- ▶ Senior Management team – if serious
- ▶ Duty Manager – if not already involved
- ▶ Line Managers - include how staff were supported at the time (including LMCs, Allied Health, Health Care assistants, Administration and Educational Organisations if students involved). Send an email if after hours

Next day

Think about how you are feeling. Do you need to talk about the critical incident and / or how you handled the role of supporting staff afterwards?



BEING A MANAGER

There are various supports that can be offered after an event. A key factor in their success is the underlying attitude and approach of the organisation. Managers are key to making a difference.

One of the biggest effects on how well a health professional feels they are supported is from how the organisation responds or is perceived to respond – as a manager you are representing the organisation.

*“...I felt like he believed in me... That made a huge difference”
‘Women’s Health professional’*



Immediately

Ensure the initial emotional first aid is being provided – either by yourself or a senior person

- ▶ How are the involved people feeling?
- ▶ Has there been a meeting or “emotional huddle” immediately after the event?
- ▶ Are they OK to continue working?
- ▶ Does anyone who has already gone home need to be rung?

- ▶ Does a senior person need to go with them to talk to the family and make a plan?

To be able to do this you need to know who was involved. Remember to include LMCs, those on the periphery and support staff e.g. health care assistants, allied health, clerical staff. Their line managers will need to be contacted. Refer to the ADHB policies: Critical Incident Stress Management & Reportable Events.

Next day

Provide the correct information about any review processes. Ensure the involved people have access to review the clinical record. Listen to their stories and facilitate self reflection when they are ready.

Use the following types of open questions;

Tell me what happened. What else was happening at the time?

Don’t jump in with interrogation type questions

Why did (or didn’t) you do that? Did you think of...?

Check if need time off and when can return to work.

Your own self reflection on how you interact with a member of your team after a critical incident is important. It is a skill to facilitate another person’s process of reflective learning.

Try to promote reflection rather than simply praising or blaming them. If it is identified that an error has occurred the health professional needs to be advised on their responsibility to be accountable. Information should be provided on where to get support and professional advice.

Next month

Update them on any review process.

Find out how those in your line management are feeling.

Next year

Sometimes the reviews can take a long time so put it in your calendar to ensure all the involved staff have received a copy.

Post mortem results may need to be followed up and key people provided with the information.



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THE BROKEN VASE

It happened suddenly.
I had stood for a long time on the shelf,
Like a tall vase, rounded and shaped
By the potter's hands;
Not specially beautiful
But strong and deep enough to hold the flowers
That drank within.
The glaze was richly smooth, and gleamed in the light:
But there was a certain dullness
And the delicate pattern was faded and worn.

Without warning the crash came.
I lay on the floor in pieces, frightened and hurt.
Tears drained away
And the raw clay showed red between the edges.
There was anger too in the sharp wedges
Of each broken segment,
Cutting and exposed.

At first no one could help me.
Whoever swept the shattered whole
Into a sad pile,
Did not stay to make it one again.
But slowly it came.
Painfully each part, examined carefully
Seemed to have a place
In the whole work of art.
Perhaps the miracle was the way
Others found lost pieces
Concealed among the debris of the floor
And gently gave them back to me.
Loved ones smoothed the hidden lines,
Caressing the growing shape with care and patience.

So I rebuilt my vase,
Until one day, a friend
Dared to call it whole again.
In doing so, he gave me back myself.
The moment of truth was sweet.
I have a new pattern,
Sharper but more glowing.
This time it is part of me,
Intrinsic and unique.
Once more I am strong and deep enough
To hold the flowers that drink within.

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