

4-22-2022

## Moving on after critical incidents in health care: A qualitative study of the perspectives and experiences of second victims

Melanie Buhlmann

*Edith Cowan University, m.buhlmann@ecu.edu.au*

Beverley Ewens

*Edith Cowan University, b.ewens@ecu.edu.au*

Amineh Rashidi

*Edith Cowan University, a.rashidi@ecu.edu.au*

Follow this and additional works at: <https://ro.ecu.edu.au/ecuworks2022-2026>



Part of the [Nursing Midwifery Commons](#), and the [Psychology Commons](#)

---

10.1111/jan.15274

Buhlmann, M., Ewens, B., & Rashidi, A. (2022). Moving on after critical incidents in health care: A qualitative study of the perspectives and experiences of second victims. *Journal of Advanced Nursing*. <https://doi.org/10.1111/jan.15274>

This Journal Article is posted at Research Online.  
<https://ro.ecu.edu.au/ecuworks2022-2026/571>

**ORIGINAL RESEARCH:  
EMPIRICAL RESEARCH - QUALITATIVE**

# Moving on after critical incidents in health care: A qualitative study of the perspectives and experiences of second victims

Melanie Buhlmann<sup>1</sup>  | Beverley Ewens<sup>2</sup>  | Amineh Rashidi<sup>2</sup> 

<sup>1</sup>School of Nursing & Midwifery, Edith Cowan University, Bunbury, Western Australia, Australia

<sup>2</sup>School of Nursing & Midwifery, Edith Cowan University, Joondalup, Western Australia, Australia

**Correspondence**

Melanie Buhlmann, School of Nursing & Midwifery, Edith Cowan University, 585 Robertson Drive, Bunbury WA 6230, Western Australia.  
Email: [m.buhlmann@ecu.edu.au](mailto:m.buhlmann@ecu.edu.au)

**Funding information**

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

**Abstract**

**Aims:** To gain a deeper understanding of nurses and midwives' experiences following involvement in a critical incident in a non-critical care area and to explore how they have 'moved-on' from the event.

**Design:** An interpretive descriptive design guided inductive inquiry to interpret the meaning of moving-on.

**Methods:** Purposive sampling recruited 10 nurses and midwives. Data collection comprised semi-structured interviews, memos and field notes. Data were concurrently collected and analysed during 2016–2017 with NVivo 11. The thematic analysis enabled a coherent analytical framework evolving emerging themes and transformation of the data into credible interpretive description findings, adhering to the COREQ reporting guidelines.

**Results:** The findings revealed five main themes: Initial emotional and physical response, the aftermath, long-lasting repercussions, workplace support and moving-on.

**Conclusion:** This study shed light on the perceptions of nurses and midwives who lived through the impact of critical incidents. Through their lens, the strategies engaged in to move-on were identified and their call for organizational and collegial support received a voice.

**KEYWORDS**

adverse event, clinical incident, coping, critical incident, midwifery, midwives, nurses, nursing, trauma

## 1 | INTRODUCTION

Health care is intrinsically risk laden giving rise to critical incidents that are often associated with devastating consequences for those involved (Joint Commission, 2018; Ozeke et al., 2019). Although patient safety is a serious global public health concern, the World Health Organization (WHO) estimates one in 10 patients are harmed whilst receiving hospital care (World Health Organisation, 2022). It is presumed that health care professionals are able to deal with the severity

and seriousness of these events and return to emotional and cognitive function in readiness to continue with their professional responsibilities (Stone, 2020; Wands, 2021). The SARS-CoV-2 (COVID-19) pandemic further challenges, and in many cases stretched the capacity of health care professionals worldwide, yet still, they continue to provide care for patients, in overwhelming work conditions and being isolated from their families, friends and colleagues (Mehta et al., 2021). To effectively support health care professionals, their challenges and needs must be understood and addressed.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2022 The Authors. *Journal of Advanced Nursing* published by John Wiley & Sons Ltd.

A critical incident is defined as 'a sudden unexpected event that has an emotional impact sufficient to overwhelm the usually effective coping skills of an individual and cause significant psychological stress' (de Boer et al., 2011, p. 316). A critical incident may not necessarily stem from catastrophic circumstances, the complex emotional, physical and professional impact on those involved can occur following any adverse event, clinical error or patient incident (de Boer et al., 2011; Wands, 2021; Werthman et al., 2021). Despite the heterogeneity of critical incidents, the involvement in them can cause many health care professionals to experience extreme emotional suffering and deeply disturbing perceptions of their personal and professional self-image, which are often associated with long-term emotional sequelae and professional isolation (Kable & Spigelman, 2018; Tartaglia & Matos, 2020).

It has been estimated that up to half of health care professionals have been exposed to a critical incident at least once in their careers (Huang et al., 2022; Joint Commission, 2018; Ozeke et al., 2019). Those members of the health care team left traumatized by critical incidents have been labelled in a seminal work as 'second victims' (Wu, 2000, p. 726). According to Wu (2000, p. 726), the first victims are the patients and their families, whilst the staff are the second victims. This term itself is attracting controversy amongst health care consumer communities and advocate groups (Ozeke et al., 2019; Wu et al., 2020). Although they agree that support is crucial for health care professionals involved in incidents, the victim label is criticized as it infers a lack of accountability and a deviation from the vernacular and focus of patient safety (Clarkson et al., 2019; Wands, 2021).

It is irrefutable that health care is perceived as personally and professionally demanding, often leading to occupational stress that takes a toll on the physical and mental health of the workforce (Veda & Roy, 2020; Wands, 2021). The development of conditions such as personal distress, burnout and reduced empathy can manifest as a result of being exposed to incidents in a professional capacity (Schroder et al., 2019). If untreated, they may result in severe consequences, including depression, emotional exhaustion, post-traumatic stress disorder (PTSD) and suicidal ideation (Tartaglia & Matos, 2020). These consequences may collectively lead to an increased risk of future errors and can negatively impact the quality of patient care resulting from emotional distancing (Schroder et al., 2019; Thompson et al., 2021; Veda & Roy, 2020). Work-related stress and professional burnout are amongst the most complex and influencing factors in the retention and attrition of nurses and midwives (Australian Government Department of Health, 2013; Veda & Roy, 2020).

Nurses and midwives represent 59% of the international health workforce, equating to 28 million, and critical in the delivery of health care (World Health Organisation, 2020). The State of the World's Nursing report in 2020 published by the WHO detailed the nursing and midwifery shortages estimated to reach 5.7 million by the year 2030 (World Health Organisation, 2020). Amidst a global pandemic and with projections that the world's population aged 60 and over will nearly double by the year 2050 (World Health Organisation, 2018), the demands on health care associated

## Impact

### What problem did the study address?

- Critical incidents contribute to work-related stress and strategies employed by nurses and midwives to move on are not widely reported.

### What were the main findings?

- Nurses and midwives experienced intense initial reactions and tumultuous emotions in the aftermath of the event and wanted to share their burden.
- Various unsupportive workplace practices convoluted the reclamation of professional competence.
- Adaptive strategies to promote physical and mental well-being enabled the participants to rise above the impact of critical incidents.

### Where and on whom will the research have an impact?

- Findings have the potential to inform health care organizations to support others who experience critical incidents.
- Nursing and midwifery education programs should raise awareness of the potential effects associated with critical incidents.

with this shift, combined with the projected shortfall of nurses and midwives, makes their retention in the workforce even more imperative.

Developing a deeper understanding of the second victims' experiences and the support they require to maintain their clinical roles, could counteract the work-stress related attrition in nursing and midwifery. This has the potential to promote retention, reduce staff turnover and contribute to reducing the projected national and international workforce shortages of nurses and midwives (Huang et al., 2022; World Health Organisation, 2020).

## 1.1 | Background

The impact of critical incidents on work-related stress in many health care professions is well documented, especially as this is incongruent with the ethos of health care professionals who provide direct care and strive to protect their patients from harm (Arfanis & Smith, 2012; Ozeke et al., 2019; Werthman et al., 2021). Complex sorrow and psychological injury may manifest, particularly when events lead to patient harm or death, resulting in feelings of inadequacy, professional incompetence, anxiety, depression and in extreme cases, suicide (Grissinger, 2014; Werthman et al., 2021).

Many health care professionals worry about the security of their jobs, suffer a loss of reputation, have difficulty forgiving themselves

and feel abandoned by their health care organizations because they are too ashamed to request emotional support (Edrees & Federico, 2015; Wands, 2021). In some cases, lives fall apart. Others remain haunted throughout their careers and silently endure the consequences of workplace stress as a result of a critical incident during their time of greatest need (Grissinger, 2014). Combined with the emerging emotional burden of resource rationing and ethically fraught decisions imposed by the COVID-19 pandemic, many health care professionals experience additional stress and anxiety at work whilst being forced to distance from their support network to avoid transmitting SARS-CoV-2 (Mehta et al., 2021). Despite awareness of the personal, social and professional effects of work-related stress, it has been acknowledged that health care organizations fail to provide adequate support mechanisms to address these potential sequelae (Kable & Spigelman, 2018; Stone, 2020; Werthman et al., 2021).

A systematic review of the contemporary literature for this study followed the methodological framework of a systematic review developed by the Joanna Briggs Institute (JBI, 2018), to ensure all eligible sources were identified and critically analysed as well as synthesized to capture important patterns and themes (Booth et al., 2016). This process facilitated the development of a specific review question, inclusion and exclusion criteria, a comprehensive search, critical appraisal, data analysis and final presentation of findings (Aromataris & Pearson, 2014). The systematic review reported the need for support of second victims, in specific health care professions, including physicians and ambulance personnel, or health care professionals primarily employed in Intensive Care Units (ICU) or Emergency Departments (ED) (Buhlmann et al., 2021). Foregrounded in second victim research is the notion of allowing second victims to share their stories and to be heard, to reduce their emotional burden and receive professional reassurance (McLennan et al., 2015; Scott et al., 2009; Stone, 2020). Although these studies explored the significant impact of critical incidents, only some described the path to recovery and shared the measures applied to thrive and continue their professional practice in the clinical setting (Buhlmann et al., 2021). The rigorous search and critical synthesis of the literature in this study did not reveal publications that specifically explored the strategies utilized by nurses and midwives in non-critical care areas. Although their experiences may be similar to ICU or ED, there is a paucity of studies reporting on how they moved-on and how their future professional lives may have been influenced by the exposure to critical incidents in these clinical settings.

To address the gap in the literature, this study focused on revealing the successful strategies employed by nurses and midwives who were able to move-on and continue to thrive, both personally and professionally. Illuminating these strategies and the insights gained could be a valuable source of support for others who have been involved in similar events. The findings from this study are relevant to health care organizations and also nursing and midwifery education programs. The insights shared by the participants may prepare future health care professionals for the potential impact of critical incidents in all areas of practice and normalize help-seeking behaviour to receive support to move-on.

To foster and promote a workplace culture that is receptive to the needs of second victims and actively supports their personal and professional recovery after critical incidents, is a key component to maintain the health and wellbeing of our workforce. This paper shares what can be learned from the experiences of nurses and midwives who have moved-on after the impact of a critical incident and informs the body of evidence in the area.

## 2 | THE STUDY

### 2.1 | Aims

The aims of the study were to explore the experiences of nurses and midwives in non-critical care areas who have been involved in a critical incident; to identify adaptive strategies they employed to move-on and explore if exposure to the event influenced their future professional lives. The following design choices were made to answer the specific research question 'what can be learned from the experiences of nurses and midwives who have moved-on after the impact of a critical incident that may be helpful to support nurses and midwives undergoing such experiences in the workplace?'

### 2.2 | Design

This research adhered to the consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups (Tong et al., 2007) and was undertaken by the researcher and corresponding author, a registered nurse and nursing lecturer, as a Master of Nursing (Research) project under the supervision of the co-authors. Although it is a hallmark of qualitative research to recognize the pivotal role of the researcher as the instrument of the research (Creswell, 2014; Thorne, 2016), the researcher formally recognized her initial curiosity to conduct this project by undertaking and documenting an interview with herself. This enabled the researcher to situate herself with in the research and address her disciplinary heritage. The motivation for this study arose from the researcher's own involvement in many critical incidents over 20 years of nursing in various clinical settings, as well as in her roles as educator and clinical risk manager. Acknowledging her personal experiences and assumptions, as well as recognizing the philosophical notions which underpin this project, helped her to conceptualize the research and informed her theoretical and cultural positionality. This reflexivity disclosed her views and how these might directly or indirectly influence the design, execution, data analysis and interpretation of the research. It also located her within the health care culture and context of nursing and midwifery reality.

There was no prior relationship between the researcher and the study participants. An information letter introduced the researcher and declared the reasons, benefits, and risks of the study.

The methodology of interpretive description strengthened the design and enabled the interpretation of themes and patterns from

the participants' experiences (Thorne, 2016). Whilst interpretive description permitted flexibility in design variations because it integrates elements of theoretically-driven traditional approaches such as phenomenology, ethnography and grounded theory, it also ensured the integrity and coherence of a defensible approach to interpret the experiences of nurses and midwives in their own reality. Applying this rigorous, yet non-prescriptive methodology determined the processes of participant sampling and recruitment, data collection and analysis. Interpretive description methodology further enhanced the credibility and trustworthiness of this study by generating findings that remained connected to the situation, the time and the context from which they originated (Thorne, 2016).

## 2.3 | Sample/Participants

To achieve representative credibility, purposive sampling was applied to ensure that the participants were selected for the purpose of addressing the aims of this study (Thorne, 2016). Participants were recruited through a variety of methods including via social media, newspapers, professional organizations and various networks of the University. Participants were included if they considered they had moved-on following a critical incident in a non-critical care setting and were employed as a registered nurse (RN), enrolled nurse (EN) or registered midwife (RM) at the time of the incident (Table 1). Participation was excluded if the incident was undergoing legal proceedings or was under review by a health care organization or disciplinary board at the time of the interview. A total of 11 ( $n = 11$ ) potential participants self-identified to participate in this study; only 10 ( $n = 10$ ) met the inclusion criteria and were eligible to participate.

## 2.4 | Data collection

Data collection occurred by separate but inter-related data collection processes between 6 June 2017 and 16 October 2017.

TABLE 1 Profile of research participants

Participant <sup>a</sup>	Role	Location of incident	Time since incident	Incident category
P1 - Florence	RN	Medical ward	32 years	Medication error
P2 - Lucy	RN	After hours manager	8 years	Other: Bomb threat
P3 - Erica	RN	Hospital car park	5 years	Other: Code blue
P4 - Rebecca	RN	Staff development	3 years 8 months	Other: Medication error
P5 - Laura	RN	Palliative care	2 months	Other: Unexpected survival after resuscitation
P6 - Sandra	RN	Remote mining camp	5 years	Unexpected death
P8 - Andrea	RN	Medical ward	8–10 years	Delay in recognizing/ responding to deterioration
P9 - Bianca	EN	Surgical ward	5 months	Unsuccessful resuscitation attempt
P10 - Yolanda	RN	Surgical ward	5 months	Sub-standard care
P11 - Abby	RM	Maternity ward	3 years 6 months	Unexpected death

<sup>a</sup>Participants were bestowed a pseudonym, P7 met exclusion criteria.

Congruent with interpretive description, multiple data sources were drawn upon to contribute to the trustworthiness of the findings from the study (Hunt, 2009; Thorne, 2016). Participants took part in individual face-to-face interviews in person or via videoconferencing at dates and times convenient to them. Due to the sensitive nature of the topic, a safe and confidential setting external to the clinical environment was used to promote sharing of experiences.

Each interview opened with a grand tour question 'please tell me more about your experience of living with the impact of the critical incident you were involved in' and followed an interview schedule (Table 2), which the researcher tested on herself. The duration of each digitally recorded interview was open-ended but took between 30 to 60 min. Each interview was transcribed verbatim immediately, accompanied by field notes and reflexive memos, and developed into a narrative of each story, which was returned to the participants for verification. This approach served as a meaningful method of member-checking because it enabled the enlargement and expansion of the initial data as the participants corroborated interpretations and made further comments (Thorne, 2016). After the 10th interview, the researchers considered that sufficient depth and richness of the data had been achieved and to cease data collection to commence the more advanced analytical phase of analysis.

## 2.5 | Ethical considerations

This research complied with the National Statement on Ethical Conduct in Human Research (National Health and Medical Research Council, 2015), the Privacy Act 1988 (Commonwealth of Australia, 2016), the Australian Code for the Responsible Conduct of Research (National Health and Medical Research Council, 2007) and received approval by the Research Ethics Committee of the relevant University (approval number 17398). All participants were informed of the risks and benefits of their participation and were made aware of the right to withdraw from the study at any time without ramifications. The privacy of participants was protected by de-identifying all

TABLE 2 Interview schedule

Phase 1
Are you/were you a registered nurse/enrolled nurse/registered midwife?
What clinical area were you working in when the critical incident happened?
Without disclosing any details about the critical incident, can you categorize what type of event you were involved in?
Do you remember how long ago the incident occurred?
Phase 2
Grand tour question: Please tell me more about your experience of living with the impact of the critical incident you were involved in.
Please tell me how you felt at the time of the event.
Do you think you have been able to move past the impact of the critical incident?
Please tell me more about your experience with moving on.
Have you identified specific strategies that helped you move past the critical incident?
Please tell me more about the strategies that helped you move on.
Can you explain how the experience of the critical incident has influenced your professional life?
Phase 3
Additional questions arising from previous interviews as a result of the concurrent data collection and analysis consistent with interpretive descriptive methodology.

data sources and by the use of pseudonyms and participant numbering. As this study principally focused on the experiences of nurses and midwives, details of the actual critical incident were not investigated.

## 2.6 | Data analysis

Thorne (2016) provided guidance on the cognitive taxonomy articulated by Morse (1994), which followed four sequential intellectual processes that are a useful depiction for the inductive construction of meaning: comprehending, synthesizing, theorizing and re-contextualizing. These four processes supported the concurrent data collection and analysis processes and channelled the mental attitudes and cognitive operations, which underpinned the analytic approach to transform the data from pieces into patterns and from patterns into themes (Thorne, 2016).

The elemental methods of the initial first-cycle coding were a combination of in-vivo coding, process coding and concept coding (Saldana, 2016). 'In-vivo coding' denoted literal, verbatim labels derived from the actual terms used by the participants, which embodied the meaning inherent with the person's experience (Saldana, 2016). On the other contrary, 'process coding' made exclusive use of gerunds to connote action in the data and 'concept coding' represented a suggested meaning broader than a single action, beyond the immediately apparent and tangible (Saldana, 2016), and, therefore, provoked the inductively thinking mind to 'explore,

question, seek and tentatively interpret' (Thorne, 2016, p. 153). According to Saldana (2016), concept coding was applicable to the research genres of phenomenology, ethnography and grounded theory, honouring the ancestors of the 'meaning-making activity' of an interpretive description (Thorne, 2016, p. 192).

Pattern coding was useful to group the existing codes into a smaller number of categories and themes (Saldana, 2016). This process pulled the data from the first cycle coding into parsimonious units of analysis by identifying properties, which were thematically related (Saldana, 2016). To achieve the required interpretive mindset for this progression, the researcher contrasted and compared the data pieces to look for patterns, seek similarities, appreciate differences and embrace ambiguity (Wojnar & Swanson, 2007).

All coding decisions were made based on the epistemological, ontological and methodological requisites of the study and aligned explicitly with the research question. Although the transcripts were coded by the researcher independently with the software NVivo 11, rigour during the analytic process was ensured by deliberating and conversing with the co-authors at regular intervals. As the data analysis firmed up and revealed the general patterns and themes, the data began to transform into credible and meaningful outcomes (Thorne, 2016), which eventually rendered as the findings.

## 2.7 | Rigour

To safeguard the integrity and quality of this interpretive description and claim the findings to be rigorous, the four evaluative criteria established by Thorne (2016) were adhered to, such as epistemological integrity, representative credibility, analytic logic and interpretive authority (Creswell, 2014; Thorne, 2016). Epistemological integrity was reached by ensuring the aims and design of this study valued the epistemological principles of interpretive description methodology consistent with the philosophical worldview of constructivism (Creswell, 2014; Thorne, 2016). Representative credibility was achieved by the careful consideration of participant selection criteria and recruitment strategies that ensured the participants were representative of the population studied. Analytic logic was attained by generating a rigorous audit trail that incorporated the transparent and consistent adherence to the coherent analytical framework guided by intellectual processes of comprehending, synthesizing, theorizing and re-contextualizing (Morse, 1994). Lastly, interpretive authority was revealed by the trustworthy interpretation of the phenomenon external to the author's own experiences and bias. Consistent with inductive inquiry, clarifying questions arose from the immersion in the data transcripts of previous interviews, rather than from the personal curiosity of the researcher (Thorne, 2016).

## 3 | FINDINGS

All participants were young or middle-aged women who were involved in a critical incident in a non-critical care setting during their

career in the capacity as RN, EN or RM. Nine RNs, one EN and one RM participated in the study. The participants discussed their personal thoughts and feelings without reservation and explained their unique experiences openly and honestly, presented as quotations. Whilst the incident types were fundamentally different, several similarities and patterns evolved, which revealed five main themes: (1) Initial emotional and physical response, (2) the aftermath, (3) long-lasting repercussions, (4) workplace support and (5) moving-on.

### 3.1 | Theme 1: Initial emotional and physical response

The first theme's *initial emotional and physical response* illuminated the array of intense reactions unleashed by the involvement in a critical incident, which left most participants craving to share their burden with someone to reduce the impact of the event. Theme one features the sub-themes' *initial reaction* and *sharing the burden* (Table 3).

In the moment of realization after the incident, participants described initial shock at what had happened, quickly followed by feelings of stress and disbelief. They relied on their instincts and switched to 'autopilot mode' to keep functioning. Feelings of guilt and self-blame replaced the initial adrenaline surge and gave rise to myriad tumultuous and negative emotions. The participants compared the initial reaction to '*committing heinous crime*', feeling '*gutted*', '*sick*' or '*horribly frightened*'. Some felt ashamed and described anger with themselves, combined with an incredible sadness about the futility of what had happened. Positive self-talk alleviated some of the overwhelming feelings of despair and self-doubt, which combined with the loss of professional confidence and negative thoughts, fuelled the stress and guilt experienced by the incident. Bianca articulated this initial reaction as blaming herself:

*I was just so upset; I basically broke down in the hallway. Because the emotions hit me, and I think it was at that point - was blame. I just felt like, everything was my fault. What could I have done? Did I miss something?*

TABLE 3 Themes and sub-themes

Theme	Sub-themes
Initial emotional and physical response	Initial reaction
	Sharing the burden
The aftermath	Caught in the aftermath
	Compelled to seek help
Long-lasting repercussions	Changing career direction
	Lessons learned
Workplace support	Caring for those who care
	Unsupportive workplace
Moving-on	Moving-on
	Balancing life

Regardless of the nature of the incident, sharing the burden by telling the story at this initial stage to someone who understood the meaning of the experience was an invaluable strategy and helped them being heard.

Andrea reinforced the importance of collegial support: '*Talking to colleagues, I think is one of the main things that actually cushions you and gets you over things - it's your colleagues*'.

However, some were reluctant to breach confidentiality and remained silent. They did not speak to anyone and suffered under a veil of secrecy and in solitary silence.

Florence remembered that she was unable to talk about how she felt after the incident: '*I didn't tell anybody, I didn't tell friends, I didn't tell a soul*'.

### 3.2 | Theme two: The aftermath

Theme two is the aftermath of the critical incident and included the sub-themes *caught in the aftermath* and *compelled to seek help*. Many participants were caught in the aftermath. They withstood the fear of consequences, endured an investigation and experienced situations, which triggered the recall of the event. Some entered a period of rumination, where they searched for ways to reduce the impact and return to work and normality.

*Florence remembered: 'I would be heading towards the hospital and have difficulty breathing because I was in such a panic'*.

The effect on job satisfaction was apparent and some participants perceived their work as less enjoyable. They felt they were likely to lose the capacity for patient care and developed a sense of hopelessness.

Abby prayed on the way to work: '*Before I go to work I just hope and pray that nothing terrible happens that day. And another 'here we go again'... kind of a dread, I suppose. I feel like how much more can I handle, how much more, you know, can anyone handle, really?*'

Despite reminding participants about the availability of an Employee Assistance Program (EAP) or counselling service, the initiation to contact the services remained the responsibility of those involved in the incident. Some participants felt overwhelmed and unable to cope on their own following the incident and were eventually compelled to seek help.

Asking for help was viewed as a sign of weakness by Rebecca: '*Going to seek out someone to talk to, a counsellor was so de-valuing for me, for myself. It was terrible, I felt really pathetic for doing that*'.

### 3.3 | Theme three: Long-lasting repercussions

Participants were working through the process of rationalizing their emotions associated with the incident for a very long time and experienced significant consequences as a direct result. Intrusive recollections replayed in their minds, persistent insomnia and nightmares manifested and triggering situations caused some

participants to relive the event for an extended period of time. The initial impact and the accumulative exposure to subsequent incidents forced some of the participants to think about changing the direction of their career and even leaving the clinical setting. There was a degree of learning initiated by the involvement in the critical incident. In hindsight, learning from their experiences provided an opportunity to amend the participants' view about themselves, their professional practice and their workplace. Some became more alert, cautious and grew into 'better' nurses as a result.

Rebecca described the situation as: *'The pressure of time constraints on hospital wards and staff, the pressure to do, do, do. And sometimes, you actually need to slow down so that you actually don't make mistakes, because you take short cuts'*.

### 3.4 | Theme four: Workplace support

The workplace support varied. Only 2 out of 10 participants felt well cared for after the event with immediate debriefing, counselling opportunities and follow-up communications with managers. Unfortunately, there was often a perceived lack of managerial support for their mental and physical well-being and participants felt they were expected to cope with the consequences of the incident on their own.

Abby was disappointed and felt that: *'The so-called "support" given to us really was poor'*.

Although most workplaces operated under a 'no blame—just culture' philosophy, when it came to incidents, the fear of being blamed for what happened was still real for five participants. Expressions of guilt, anxiety and nervousness associated with receiving blame permeated their thoughts. A lack of professionalism from those affected by second victims impacted the interprofessional relationships amongst colleagues and poor communication channels between different members of the health care team complicated the recovery.

Laura doubted the existence of a blame-free culture at her workplace: *'On the management level, no. Because they will come after you if you have done something wrong. The only time I ever get phone calls from work during the week is when I have forgotten to sign something or you know, there has been something I had not done. I would never get a phone call saying 'well done for coping with that ridiculously busy shift you have just done'. No blame - I don't know?'*

Additionally, as part of an incident follow-up, it was standard practice to offer the contact details to the EAP or other form of counselling service to those affected by the incident.

Rebecca advocated for mandatory counselling: *'You have been involved in a critical incident, it is out of the norm of your workspace, and you must go. It is like they do with the cops and stuff. Some of the things you have to go through before you can go back to work'*.

Many participants perceived this procedure as insincere because they felt their managers were simply 'ticking the box' and left them to deal with the aftermath of the incident on their own.

Sandra put this expectation into words: *'Well, they just expect that nurses get on with things, don't they? Because we are 'copers' and we can do things. We are very good at pretending we are ok, even when we are not. As I said, you cope with that at the time, and then you freak out afterwards!'*

### 3.5 | Theme five: Moving-on

The theme *moving-on* from the involvement in a critical incident illuminated the subthemes *moving-on* and *balancing life*, reflecting that moving-on did not mean to forget about what happened. All participants remembered the events very well, however, they learned to accept what happened and continued to live their personal and professional lives, whilst trying to achieve a balance between the two. This was illustrated by Florence after 32 years following the incident: *'I have moved-on, but you never forget it, you never forget it!'*

The majority of participants affirmed that they have moved on entirely and maintained their clinical roles by using adaptive strategies detailed below, such as feeling equipped to cope, helping themselves and taking their time to 'get back on the horse'.

Laura recalled: *'I mean I don't feel devastated by it now, you know. I did at the time, but I have moved on'*.

Those who felt 'equipped to cope', viewed themselves as capable to manage difficult situations in their life and were able to navigate the aftermath of the incident more easily, whilst maintaining their professional clinical roles. Two participants mentioned their resilient personality, which gave them a more positive outlook. They felt more adept to overcome the emotional and physical responses evoked by the incident.

Lucy felt equipped to cope: *'So I just feel like I am quite well equipped to deal with that and I say if we go back there, I was reasonably fit. I exercised and I would eat properly. Had a pretty good balance in my life, happy—yeah'*.

Whilst some participants were deliberately looking for new priorities to concentrate on to help themselves, others unintentionally transferred their attention towards different areas of their lives. However, getting back on the horse proved to be a challenging undertaking for several participants. Maintaining their clinical role was not straightforward for all participants; two of them began to struggle and anticipated leaving the profession completely.

*'My philosophy was, if you fall off the horse - get back on it. Tough it out princess! I could not get back on the horse. The horse kept bucking me off. I had to find a different horse to get on. And I have, I think'* explained Rebecca.

Achieving a balance in life was considered by participants as an important mechanism to move-on and maintain their clinical roles. Although highly individual, most participants engaged in exercise and physical activity. Whilst others learned to take care of themselves through various forms of self-care, such as mindfulness, meditation, spending time with family and friends in a supportive environment and controlling unhealthy habits.

Five months after the incident, Bianca described that: *'I definitely look after myself a bit more, like trying not to get burnt out at work'*.

These strategies, as well as taking regular leave at work, allowed some of the participants to create a physical distance between themselves and the incident and distracted their minds enough to avoid dwelling on issues that happened at work. An increase in alcohol intake to mellow, settle and cope after work at the end of the day or overindulging in certain foods such as sweets and chocolate, became a noticeable habit for two participants. Gaining control over such unhealthy and potentially harmful behaviours was an empowering way to improve their level of well-being and contributed to achieving a balanced life.

Erica openly confessed: *'I noticed I quite liked a glass of wine or two after work or at the end of the day. And then I was saying, I am drinking more and I noticed that this is not healthy'*.

## 4 | DISCUSSION

Despite a significant period of time elapsing since the incident occurred, the 10 participants were still able to vividly describe the impact associated with it. Irrespective of the type or location of the incident, several congruent short and long-term effects came to light. The participants conveyed various unsupportive workplace behaviours, as well as a preconceived acceptance that nurses and midwives were expected to 'get on' with these exposures at work. These workplace practices compromised their recovery and convoluted the reclamation of their professional competence. Several adaptive strategies were identified, such as achieving a balance in life by taking care of their own physical and mental well-being, controlling unhealthy habits and taking regular leave from the workplace. Whilst all participants considered that they moved-on from their experiences, some were able to continue to thrive in their profession and clinical role, whilst others began to struggle and felt compelled to look for an alternative solution.

The experiences and insights so candidly shared by the participants have contributed to a growing body of research into the 'second victim' phenomenon since Wu (2000, p. 358) drew attention to the term two decades ago. The personal and professional disruption experienced by second victims has been identified as subjective and decidedly individual, thus a 'one size fits all' discipline-specific approach must be cautioned (Harrison et al., 2015, p. 32; Huang et al., 2022).

Theme one of this study revealed that the involvement in a critical incident unleashed an array of intense physiological and emotional reactions, which gave rise to myriad powerful negative emotions and feelings of unyielding stress and disbelief. Nurses who participated in a survey related to medication errors described feelings of penetrating emotional distress, self-blame, shame and guilt (Jones & Treiber, 2017). A group of nurses, physicians and chaplains of an American study that explored the impact of critical incidents, compared their experiences to a ship 'navigating the tumultuous sea' as severe reactions, deepened by disbelief, sadness and exhaustion

engulfed them (Mayer & Hamilton, 2018). A Chinese cross-sectional survey investigated the desired forms of support amongst 2897 nurses and reported various degrees of negative physical, psychological and occupational impacts (Huang et al., 2022). American nurse anaesthetists also reported decreased professional self-efficacy, absenteeism and turnover intentions (Thompson et al., 2021), which correspond with the findings of this study.

The participants in this study perceived it as cathartic to tell their story as a therapeutic process following traumatic experiences, which has been well established in the trauma literature (Donaldson-Andersen, 2017; Ewens et al., 2018; Nurser et al., 2018). Coherent with the findings of this study, many second victims mentioned that they actively sought informal support from co-workers to talk about the incident and receive reassurance, validation and normalization when peers show empathy and solidarity (Huang et al., 2022; Mayer & Hamilton, 2018; Thompson et al., 2021).

However, some participants felt reluctant to speak out for fear of breaching patient confidentiality, others felt incapable of divulging work-related issues to an uninvolved colleague, family member or friend and some were actively advised by their employer to refrain from disclosing any details of the incident. Rinaldi et al. (2016) mentioned that some of the participants of their study did not know how to ask for help and to whom to turn, which contributed to a concept of 'suffering in silence' described by Ullström et al. (2014) in their Swedish study that investigated how health care professionals were affected by adverse events.

The widespread impact of the initial emotional and physical response to a critical incident can be far-reaching and under-recognized (Elmir et al., 2017; Joint Commission, 2018; Jones & Treiber, 2017; Mayer & Hamilton, 2018). This impact deserves special attention since the COVID-19 pandemic acutely heightened the distress amongst health care professions and all populations (Holman et al., 2020). To enable nurses, midwives and other health care professionals to share their burden of self-doubt and negative thoughts related to the incident, the veil of secrecy must be lifted (Huang et al., 2022; Robertson & Long, 2018; Thompson et al., 2021).

Theme two indicated that shortly after the initial reactions stabilized, the participants found themselves caught up in the aftermath of the critical incident, where intense feelings and emotions gave way to a cycle of self-evaluation and speculation of how the health care organization would react to the critical incident. Similar perceptions were reported by Scott et al. (2009) in an exploration of the recovery of second victims in America, where nurses and physicians contemplated repercussions of the event that affected their job security. Many health care professionals mentioned that they repeated the sequence of events in their minds over and over again and some even found themselves waking up at night and thinking about what happened (Stone, 2020; Ullström et al., 2014). The discussion of the second theme highlighted that the seriousness of the aftermath in the wake of critical incidents was largely underestimated and under-supported (Rinaldi et al., 2016; Stone, 2020; Ullström et al., 2014). Nurses, midwives and other second victims were compelled to seek

help as they worried about consequences and unpleasant investigations. Dealing with reflective thoughts and trying to circumvent triggering situations when returning to work was a challenge (Mayer & Hamilton, 2018; White et al., 2015).

Some participants of this study felt overwhelmed, were unable to cope on their own and felt compelled to seek help. Although they were aware of the free counselling service available to them through the EAP, they reported difficulties with initiating contact. It is a common perception of second victims that they are expected to be 'tough' and handle incidents as if they were just a standard part of the job (Mayer & Hamilton, 2018; Rodriquez & Scott, 2018). More than half of the 12 acute care nurses who participated in an American study that explored perspectives of organizational support after adverse events, waited before reaching out to see if their managers would seek them out first, which rarely occurred (Stone, 2020). Analogous to the findings of this study, in America where employee support programs were available in many health care organizations, the uptake of the service was largely dependent on the initiative of the individual and an automatic referral system was also not in place (Joint Commission, 2018; Stone, 2020; White et al., 2015).

Theme three described the long-lasting repercussions as the participants tried to rationalize their emotions associated with the incident. Rinaldi et al. (2016) confirmed that although the onset of emotional and physical symptoms was reported as immediately following the incident, the duration of these symptoms lasted for a prolonged period of time and was still present years later. Similarly, the findings of a meta-ethnographic analysis of midwives' and nurses' experiences of adverse labour and birth events reported the lasting impact of incidents with the theme, this 'adds another scar to my soul' and many reported that their memories became more lucid and powerful as time went on (Elmir et al., 2017, p. 4194). Critical incidents have been described in the literature as life-changing events that have the potential to form a permanent imprint in the memory of those involved in them (Dekker, 2013; Rodriquez & Scott, 2018). An investigation into the wellness of American surgeons revealed, that this undeviating imprinted memory led to such despair, they compared the experience to feel 'enveloped in a dark cloak', which engulfed their personal and professional lives (Marmon & Heiss, 2015, p. 316), to such an extent that some became more likely to contemplate suicide or experience suicidal ideation (Shanafelt et al., 2011; Wu et al., 2020). 'Suicides are the tip of the iceberg' for second victims was suggested in a workforce leadership summary after a UK-wide study of suicide by health care professionals involved in serious incidents revealed significant consequences (Madhok, 2014, p. 26; Wu et al., 2020). Although comparable data related to suicide is scarce for nurses or midwives, the story of Kimberly Hiatt illustrated a grave outcome brought about by a critical incident. She was involved in a medication error that led to the death of a young child, and became increasingly depressed and professionally isolated to the point where she lost all hope and took her own life (Saavedra, 2015). The literature supported the findings of the third theme of this study and suggested that the repercussions following the widespread impact and extensive aftermath of critical incidents

were described as enduring and long-lasting (Elmir et al., 2017; Rinaldi et al., 2016; Rodriquez & Scott, 2018).

Theme four presented one of the most significant findings from this study, that despite the widely acknowledged need for support to overcome the impact of critical incidents, the assistance the participants of this study received from the workplace, was repeatedly perceived as inadequate, which resonated strongly in the contemporary literature (Kable & Spigelman, 2018; Rinaldi et al., 2016; Stone, 2020). Previous studies highlighted that the availability of workplace support varied, and its adequacy was largely determined by the individual perception of those involved (Huang et al., 2022; Stone, 2020; Ullström et al., 2014). Other research indicated that the workplace support offered was unsatisfactory for up to 85% of the physicians, nurses and midwives who took part in the Italian exploration of the path to recovery for second victims by Rinaldi et al. (2016). Similar findings emerged from a recent Australian study of the effects of adverse events on acute care nurses, who deemed adequate workplace support as imperative to minimize the impact associated with it. However, the authors concluded that an improvement in the organizational response to second victims could assist them to reclaim their professional self-confidence and return to clinical duties more effectively (Kable & Spigelman, 2018). The discussion of theme four brought significant issues to the fore related to current perceptions of the inadequacy of workplace support after critical incidents, despite the efforts made by organizations and their managers (Huang et al., 2022; Rinaldi et al., 2016; Stone, 2020). Stone (2020) highlights that an error-free health care environment does not exist, and when errors occur, support is often unfavourable and unforgiving. By actively promoting the well-being of second victims, managers and colleagues can contribute to build their professional resilience, help prevent the domino effect critical incidents can have on their performance and thus protect the future of their profession (Joint Commission, 2018; Schmidt & Haglund, 2017; Scott & McCoig, 2016); whilst certain barriers, such as bullying, assigning blame and the expectation to cope, require organizational attention (Cooper et al., 2017; Sauer & McCoy, 2018). Future research is required to establish, improve and evaluate appropriately designed support and intervention systems, as well as a positive workplace culture to facilitate and normalize the complex emotional and professional recovery of second victims. Although some workplace support was provided, the second victim determined its effectiveness and adequacy and should, therefore, be considered the key driver in defining the level and length of assistance made available.

Theme five described a toolkit of coping strategies and practices that helped the participants to navigate and move-on from the impact of the incident. The participants of this study depicted a positive outlook in life and acknowledged the importance of a work-life balance in alleviating the responses to the profound and enduring impact of critical incidents, which was not widely explored in association with critical incidents. Previous research proposed that the development of unique ways of coping and the maintenance of performance despite the continued torment stemming from the event contributed to the ability to survive in the health

care professions (Mayer & Hamilton, 2018; Scott et al., 2009). Mayer and Hamilton (2018) indicated that many second victims developed their own self-help strategies, rituals and routines to prepare to start or end their shifts. An American nurse in their study used the drive home as a personal debrief space and when she turned the car off, she cognitively transitioned from the role as a nurse into her role as a mother (Mayer & Hamilton, 2018). Another nurse managed the reflective process by thinking of three things she could have done better and three things that went really well at the end of her day; after that, it was her personal time and she left the hospital physically and mentally behind (Mayer & Hamilton, 2018).

Several participants of this study viewed themselves as resilient and capable to manage and thrive under difficult circumstances. Prior research investigated the connection between workplace stress, personality traits and resilience, and explored methods to learn to cope, survive and move-on (Habibzadeh et al., 2020; Lewis et al., 2015; Mealer, Jones, Newman, et al., 2012). The concept of resilience refers to the ability to maintain psychological functioning despite exposure to adversity, and traits of resiliency encompass coping skills such as optimism, building social networks, finding resilient role models, exercising, developing moral beliefs and cognitive flexibility (Lewis et al., 2015; Mealer, Jones, & Moss, 2012; Mealer, Jones, Newman, et al., 2012). Researchers claim resiliency can be learned and could therefore serve as either a preventative measure or post-event strategy to assist health care professionals to thrive again in a tension-charged and highly stressful environment (Habibzadeh et al., 2020; Lewis et al., 2015).

The relationship between adverse events and nurse burnout has been studied to examine whether nurse second victims experienced burnout (Habibzadeh et al., 2020; Lewis et al., 2015). A link was established between elements of emotional exhaustion, depleted emotional resources, depersonalisation, such as callousness or cynicism towards patients, and dwindling personal or professional accomplishment in a low safety culture associated with the involvement in adverse events (Habibzadeh et al., 2020; Lewis et al., 2015). This is of particular importance currently due to the moral and emotional distress unbridled by the COVID-19 pandemic, which exacerbates many factors that threaten the resilience of health care professionals and adds to the risk of professional burnout (Mehta et al., 2021). To alleviate harm and prevent such burnout, support from health care organizations to monitor and educate second victims regarding signs and symptoms of burnout, as well as the promotion of coping strategies to improve a work-life balance was recommended (Habibzadeh et al., 2020; Lewis et al., 2015).

Moving-on from critical incidents was dependent on multiple factors, the extent of the impact, the severity of repercussions and the perceived adequacy of the workplace support, which should be based on the expectations of the health care professionals (Huang et al., 2022; Rodriguez & Scott, 2018; Stone, 2020). In the current COVID-19 climate, health care professionals are often faced with the futility of care and exposed to pandemic related critical incidents, whilst deeply concerned for the safety of their patients as well as their own health (Mehta et al., 2021; Rhéaume et al., 2021).

Potentially there could be many more nurses, midwives and other health care professionals caught up in the aftermath of critical incidents who sought ways to help themselves to move-on and regain the professional confidence required to remain in the workforce, and yet go unrecognized.

#### 4.1 | Strengths

The findings from this study are contemporary in view of the looming global shortage of nurses and midwives and have contributed to the gap in the international literature surrounding this topic from an Australian perspective. Globally, nurses and midwives are essential in the delivery of quality care. It is therefore vital for health care organizations and the managers within them to understand how critical incidents impact nurses and midwives in non-critical care areas, and how to support their mental health and well-being to retain them and sustain a healthy workforce.

#### 4.2 | Limitations

The results of an interpretive descriptive study are fundamentally associated with the context, the situation and the time in which they were created. Participants were located in one regional or metropolitan state in Australia at the time of the incident and self-identified to have moved-on, which potentially contributed to self-selection bias. The time since the incident occurred varied from 2 months to 32 years. Whilst the participants retained a distinct and vivid memory of the events, recall bias may have impeded the degree of detail remembered or altered the intensity of the experience (Takehara et al., 2014). Although the researcher implemented measures to avoid personal preconceptions, the findings are ultimately the researcher's analysis of the participants' stories, influenced by her interpretation of their accounts, which may be considered biased. Whilst the 10th interview still produced some new information, data collection was concluded. Contrary to the notion of saturation commonly used in qualitative research, interpretive description recommends an arbitrary sample size as there are potentially infinite variations of human experiences and thus, saturation may never be achieved (Thorne, 2016). However, these limitations did not undermine or weaken the richness of the data interpreted or the potential impact or the findings.

### 5 | CONCLUSION

This study illuminated that moving-on after critical incidents is a complex and wearisome recovery. It was evident that a lack of organizational support exacerbated their emotional, physical and professional reactions. With limited or no organizational guidance, the sequelae of involvement in critical incidents contributed to PTSD, burnout and attrition. Several recommendations were

made to strengthen and evolve current support systems so that second victims can be better prepared, supported and closely monitored. Health care organizations may provide a multipronged approach to offer genuine, blame-free and formal support structures to mitigate the destructive emotions linked to the negative influence on the quality of care. Education programs may implement strategies in undergraduate and postgraduate curricula to cultivate resilience and promote the development of coping skills, especially amidst the grip of the global COVID-19 pandemic. Further exploration of the effectiveness of support services and adequacy of workplace practices to meet the needs and sustain retention should be conducted. Nurses and midwives are essential in the delivery of quality care and rely on an organizational culture that cares to enable them to deliver compassionate care, now more than ever.

### ACKNOWLEDGEMENTS

Acknowledgement of the Edith Cowan University Graduate Research School and Librarians Diane Ingram and Deborah Turner for the delivery of professional development skills and assistance with the database search.

### CONFLICT OF INTEREST

No conflict of interest has been declared.

### PEER REVIEW

The peer review history for this article is available at <https://publons.com/publon/10.1111/jan.15274>.

### DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictions.

### ORCID

Melanie Buhlmann  <https://orcid.org/0000-0002-3528-3165>

Beverley Ewens  <https://orcid.org/0000-0003-2008-7214>

Amineh Rashidi  <https://orcid.org/0000-0001-7355-5216>

### REFERENCES

- Arfanis, K., & Smith, A. (2012). Informal risk assessment strategies in health care staff: An unrecognized source of resilience? *Journal of Evaluation in Clinical Practice*, 18(6), 1140–1146. <https://doi.org/10.1111/j.1365-2753.2011.01759.x>
- Aromataris, E., & Pearson, A. (2014). The systematic review: An overview. *American Journal of Nursing*, 114(3), 53–58. <https://doi.org/10.1097/01.NAJ.0000444496.24228.2c>
- Australian Government Department of Health. (2013). Review of the Australian Government health workforce program: Nursing and midwifery retention. Retrieved from <http://www.health.gov.au/internet/publications/publishing.nsf/Content/work-review-australian-government-health-workforce-programs-toc~chapter-7-nursing-midwifery-workforce%E2%80%93education-retention-sustainability~chapter-7-nursing-midwifery-retention>
- Booth, A., Sutton, A., & Papaioannou, D. (2016). *Systematic approaches to a successful literature review* (2nd ed.). Sage Publications.
- Buhlmann, M., Ewens, B., & Rashidi, A. (2021). The impact of critical incidents on nurses and midwives: A systematic review. *Journal of Clinical Nursing*, 30(9–10), 1195–1205. <https://doi.org/10.1111/jocn.15608>
- Clarkson, M. D., Haskell, H., Hemmelgarn, C., & Skolnik, P. J. (2019). Abandon the term "second victim". *BMJ*, 364, 11233. <https://doi.org/10.1136/bmj.11233>
- Commonwealth of Australia. (2016). *Privacy Act 1988 (C2016C00979)*. Australian Government.
- Cooper, J., Edwards, A., Williams, H., Sheikh, A., Parry, G., Hibbert, P., Butlin, A., Donaldson, L., & Carson-Stevens, A. (2017). Nature of blame in patient safety incident reports: Mixed methods analysis of a national database. *Annals of Family Medicine*, 15(5), 455–461. <https://doi.org/10.1370/afm.2123>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- de Boer, J., Lok, A., van't Verlaat, E., Duivenvoorden, H. J., Bakker, A. B., & Smit, B. J. (2011). Work-related critical incidents in hospital-based health care providers and the risk of post-traumatic stress symptoms, anxiety, and depression: A meta-analysis. *Social Science & Medicine*, 73(2), 316–326. <https://doi.org/10.1016/j.socscimed.2011.05.009>
- Dekker, S. (2013). Second victim: Error, guilt, trauma and resilience. Retrieved from [WorldCat.org](http://www.crcnetbase.com/isbn/9781466583429) database Retrieved from <http://www.crcnetbase.com/isbn/9781466583429>
- Donaldson-Andersen, J. (2017). The nurse's role in supporting patients and family in sharing personal accounts of traumatic events: A personal experience. *Journal of Trauma Nursing*, 24(2), 134–140. <https://doi.org/10.1097/JTN.0000000000000276>
- Edrees, H., & Federico, F. (2015). Supporting clinicians after medical error. *British Medical Journal BMJ*, 350, 1982–1983. <https://doi.org/10.1136/bmj.h1982>
- Elmir, R., Pangas, J., Dahlen, H., & Schmied, V. (2017). A meta-ethnographic synthesis of midwives' and nurses' experiences of adverse labour and birth events. *Journal of Clinical Nursing*, 26(23–24), 4184–4200. <https://doi.org/10.1111/jocn.13965>
- Ewens, B. A., Hendricks, J. M., & Sundin, D. (2018). Surviving ICU: Stories of recovery. *Journal of Advanced Nursing*, 74(7), 1554–1563. <https://doi.org/10.1111/jan.13556>
- Grissinger, M. (2014). Too many abandon the "second victims" of medical errors. *Pharmacy & Therapeutics: Journal for Formulary Management*, 39(9), 591–592.
- Habibzadeh, H., Baghaei, R., & Ajoudani, F. (2020). Relationship between patient safety culture and job burnout in Iranian nurses: Assessing the mediating role of second victim experience using structural equation modelling. *Journal of Nursing Management*, 28(6), 1410–1417. <https://doi.org/10.1111/jonm.13102>
- Harrison, R., Lawton, R., Perlo, J., Gardner, P., Armitage, G., & Shapiro, J. (2015). Emotion and coping in the aftermath of medical error: A cross-country exploration. *Journal of Patient Safety*, 11(1), 28–35. <https://doi.org/10.1097/PTS.0b013e3182979b6f>
- Holman, E. A., Thompson, R. R., Garfin, D. R., & Silver, R. C. (2020). The unfolding COVID-19 pandemic: A probability-based, nationally representative study of mental health in the United States. *Science Advances*, 6(42), 1–7. <https://doi.org/10.1126/sciadv.abd5390>
- Huang, R., Sun, H., Chen, G., Li, Y., & Wang, J. (2022). Second-victim experience and support among nurses in mainland China. *Journal of Nursing Management*, 30(1), 260–267. <https://doi.org/10.1111/jonm.13490>
- Hunt, M. R. (2009). Strengths and challenges in the use of interpretive description: Reflections arising from a study of the moral experience of health professionals in humanitarian work. *Qualitative Health Research*, 19(9), 1284–1292. <https://doi.org/10.1177/1049732309344612>
- Joanna Briggs Institute. (2018). *System for the unified management, assessment and review of information, software for the systematic review of literature (JBI SUMARI)*. Joanna Briggs Institute. Retrieved from <http://joannabriggs.org/>

- Joint Commission. (2018). Division of Health Care Improvement. Supporting second victims. Retrieved from [https://www.jointcommission.org/-/media/tjc/documents/newsletters/quick\\_safety\\_issue\\_39\\_2017\\_second\\_victim\\_final2pdf.pdf?db=web&hash=8B3AD29E1C947C4E39F09A547991D55B&hash=8B3AD29E1C947C4E39F09A547991D55B](https://www.jointcommission.org/-/media/tjc/documents/newsletters/quick_safety_issue_39_2017_second_victim_final2pdf.pdf?db=web&hash=8B3AD29E1C947C4E39F09A547991D55B&hash=8B3AD29E1C947C4E39F09A547991D55B)
- Jones, J. H., & Treiber, L. A. (2017). More than 1 million potential second victims: How many could nursing education prevent? *Nurse Educator*, 43(3), 154–157. <https://doi.org/10.1097/NNE.0000000000000437>
- Kable, A., & Spigelman, A. (2018). Why clinicians involved with adverse events need much better support. *International Journal of Health Governance*, 23(4), 312–315. <https://doi.org/10.1108/IJHG-09-2018-0049>
- Lewis, E. J., Baernholdt, M. B., Yan, G., & Guterbock, T. G. (2015). Relationship of adverse events and support to RN burnout. *Journal of Nursing Care Quality*, 30(2), 144–152. <https://doi.org/10.1097/NCQ.0000000000000084>
- Madhok, R. (2014). Workforce: Look out for the 'second victim' of adverse events. *The Health Service Journal*, 124(6410), 25–27.
- Marmon, L. M., & Heiss, K. (2015). Improving surgeon wellness: The second victim syndrome and quality of care. *Seminars in Pediatric Surgery*, 24(6), 315–318. <https://doi.org/10.1053/j.sempe dsurg.2015.08.011>
- Mayer, D. D. M., & Hamilton, M. (2018). Critical incidents in health care. *Medsurg Nursing*, 27(4), 231–237.
- McLennan, S. R., Engel-Glatte, S., Meyer, A. H., Schwappach, D. L. B., Scheidegger, D. H., & Elger, B. S. (2015). The impact of medical errors on Swiss anaesthesiologists: A cross-sectional survey. *Acta Anaesthesiologica Scandinavica*, 59(8), 990–998. <https://doi.org/10.1111/aas.12517>
- Mealer, M., Jones, J., & Moss, M. (2012). A qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses. *Intensive Care Medicine*, 38(9), 1445–1451. <https://doi.org/10.1007/s00134-012-2600-6>
- Mealer, M., Jones, J., Newman, J., McFann, K. K., Rothbaum, B., & Moss, M. (2012). The presence of resilience is associated with a healthier psychological profile in intensive care unit (ICU) nurses: Results of a national survey. *International Journal of Nursing Studies*, 49(3), 292–299. <https://doi.org/10.1016/j.ijnurstu.2011.09.015>
- Mehta, S., Machado, F., Kwizera, A., Papazian, L., Moss, M., Azoulay, E., & Herridge, M. (2021). COVID-19: A heavy toll on health-care workers. *The Lancet Respiratory Medicine*, 9(3), 226–228. [https://doi.org/10.1016/S2213-2600\(21\)00068-0](https://doi.org/10.1016/S2213-2600(21)00068-0)
- Morse, J. M. (1994). *Critical issues in qualitative research methods*. Sage Publications.
- National Health and Medical Research Council. (2007). Australian code for the responsible conduct of research. Retrieved from <https://www.nhmrc.gov.au/guidelines-publications/r39>
- National Health and Medical Research Council. (2015). National Statement on Ethical Conduct in Human Research 2007. Retrieved from <https://www.nhmrc.gov.au/guidelines-publications/e72>
- Nurser, K. P., Rushworth, I., Shakespeare, T., & Williams, D. (2018). Personal storytelling in mental health recovery. *Mental Health Review Journal*, 23(1), 25–36. <https://doi.org/10.1108/MHRJ-08-2017-0034>
- Ozeke, O., Coskun, O., & Budakoglu, I. I. (2019). Second victims in health care: Current perspectives. *Advances in Medical Education and Practice*, 10, 593–603. <https://doi.org/10.2147/AMEP.S185912>
- Rh eaume, A., Breau, M., & Boudreau, S. (2021). A critical incident study of ICU nurses during the COVID-19 pandemic. *Nursing Ethics*, 11(13), 317–329. <https://doi.org/10.1177/09697330211043270>
- Rinaldi, C., Leigheb, F., Vanhaecht, K., Donnarumma, C., & Panella, M. (2016). Becoming a "second victim" in health care: Pathway of recovery after adverse event. *Revista De Calidad Asistencial: Organo De La Sociedad Espanola De Calidad Asistencial*, 31(2), 11–19. <https://doi.org/10.1016/j.cali.2016.05.001>
- Robertson, J. J., & Long, B. (2018). Suffering in silence: Medical error and its impact on health care providers. *The Journal of Emergency Medicine*, 54(4), 402–409. <https://doi.org/10.1016/j.jemermed.2017.12.001>
- Rodriguez, J., & Scott, S. D. (2018). When clinicians drop out and start over after adverse events. *The Joint Commission Journal on Quality and Patient Safety*, 44(3), 137–145. <https://doi.org/10.1016/j.jcjq.2017.08.008>
- Saavedra, S. (2015). Remembering Kimberly Hiatt: A casualty of second victim syndrome. Retrieved from <https://nurseslabs.com/remembering-kimberly-hiatt-casualty-second-victim-syndrome/>
- Saldana, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage Publications.
- Sauer, P. A., & McCoy, T. P. (2018). Nurse bullying and intent to leave. *Nursing Economics*, 36(5), 219–224.
- Schmidt, M., & Haglund, K. (2017). Debrief in emergency departments to improve compassion fatigue and promote resiliency. *Journal of Trauma Nursing*, 24(5), 317–322. <https://doi.org/10.1097/JTN.0000000000000315>
- Schroder, K., Lamont, R. F., Jorgensen, J. S., & Hvidt, N. C. (2019). Second victims need emotional support after adverse events: Even in a just safety culture. *International Journal of Obstetrics and Gynaecology*, 126(4), 440–442. <https://doi.org/10.1111/1471-0528.15529>
- Scott, S. D., Hirschinger, L. E., Cox, K. R., McCoig, M., Brandt, J., & Hall, L. W. (2009). The natural history of recovery for the healthcare provider "second victim" after adverse patient events. *Quality & Safety in Health Care*, 18(5), 325–330. <https://doi.org/10.1136/qshc.2009.032870>
- Scott, S. D., & McCoig, M. M. (2016). Care at the point of impact: Insights into the second-victim experience. *Journal of Healthcare Risk Management*, 35(4), 6–13. <https://doi.org/10.1002/jhrm.21218>
- Shanafelt, T. D., Balch, C. M., Dyrbye, L., Beachamp, G., Russell, T., Satele, D., Rummans, T., Swartz, K., Novotny, P. J., Sloan, J., & Oreskovich, M. R. (2011). Special report: Suicidal ideation among American surgeons. *Archives of Surgery*, 146(1), 54–62. <https://doi.org/10.1001/archsurg.2010.292>
- Stone, M. (2020). Second victim support: Nurses' perspectives of organizational support after an adverse event. *Journal of Nursing Administration*, 50(10), 521–525. <https://doi.org/10.1097/NA.0000000000000928>
- Takehara, K., Noguchi, M., Shimane, T., & Misago, C. (2014). A longitudinal study of women's memories of their childbirth experiences at five years postpartum. *BMC Pregnancy and Childbirth*, 14(221), 1–7. <https://doi.org/10.1186/1471-2393-14-221>
- Tartaglia, A., & Matos, M. A. A. (2020). Second victim: After all, what is this? *Einstein (S o Paulo)*, 18, 1–3. [https://doi.org/10.31744/einstein\\_journal/2020ED5619](https://doi.org/10.31744/einstein_journal/2020ED5619)
- Thompson, M., Hunnicutt, R., Broadhead, M., Vining, B., & Aroke, E. (2021). Implementation of a certified registered nurse anesthetist second victim peer support program. *Journal of Perianesthesia Nursing*, 1–8. <https://doi.org/10.1016/j.japan.2021.05.005>
- Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice* (2nd ed.). Routledge.
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>
- Ullstr om, S., Andreen Sachs, M., Hansson, J., Ovretveit, J., & Brommels, M. (2014). Suffering in silence: A qualitative study of second victims of adverse events. *BMJ Quality & Safety*, 23(4), 325–331. <https://doi.org/10.1136/bmjqs-2013-002035>
- Veda, A., & Roy, R. (2020). Occupational stress among nurses: A factorial study with special reference to Indore City. *Journal of Health Management*, 22(1), 67–77. <https://doi.org/10.1177/0972063420908392>
- Wands, B. (2021). Second victim: A traumatic experience. *AANA Journal*, 89(2), 168–174.
- Werthman, J. A., Brown, A., Cole, I., Sells, J. R., Dharmasukrit, C., Rovinski-Wagner, C., & Tasseff, T. (2021). Second victim phenomenon and

- nursing support: An integrative review. *Journal of Radiology Nursing*, 40(2), 139–145. <https://doi.org/10.1016/j.jradnu.2020.12.014>
- White, A. A., Brock, D. M., McCotter, P. I., Hofeldt, R., Edrees, H. H., Wu, A. W., Shannon, S., & Gallagher, T. H. (2015). Risk managers' descriptions of programs to support second victims after adverse events. *Journal of Healthcare Risk Management*, 34(4), 30–40. <https://doi.org/10.1002/jhrm.21169>
- Wojnar, D. M., & Swanson, K. M. (2007). Phenomenology: An exploration. *Journal of Holistic Nursing*, 25(3), 172–180. <https://doi.org/10.1177/0898010106295172>
- World Health Organisation. (2018). Ageing and health. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
- World Health Organisation. (2020). State of the world's nursing report - 2020. Retrieved from <https://www.who.int/publications/item/9789240003279>
- World Health Organisation. (2022). 10 facts on patient safety. Retrieved from <https://www.who.int/news-room/photo-story/photo-story-detail/10-facts-on-patient-safety>
- Wu, A. W. (2000). Medical error: The second victim: The doctor who makes the mistake needs help too. *British Medical Journal*, 320(7237), 726–727. <https://doi.org/10.1136/bmj.320.7237.726>

- Wu, A. W., Shapiro, J., Harrison, R., Scott, S. D., Connors, C., Kenney, L., & Vanhaecht, K. (2020). The impact of adverse events on clinicians: What's in a name? *Journal of Patient Safety*, 16(1), 65–72. <https://doi.org/10.1097/PTS.0000000000000256>

## SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

**How to cite this article:** Buhlmann, M., Ewens, B. & Rashidi, A. (2022). Moving on after critical incidents in health care: A qualitative study of the perspectives and experiences of second victims. *Journal of Advanced Nursing*, 00, 1–13. <https://doi.org/10.1111/jan.15274>

The *Journal of Advanced Nursing (JAN)* is an international, peer-reviewed, scientific journal. *JAN* contributes to the advancement of evidence-based nursing, midwifery and health care by disseminating high quality research and scholarship of contemporary relevance and with potential to advance knowledge for practice, education, management or policy. *JAN* publishes research reviews, original research reports and methodological and theoretical papers.

For further information, please visit *JAN* on the Wiley Online Library website: [www.wileyonlinelibrary.com/journal/jan](http://www.wileyonlinelibrary.com/journal/jan)

### Reasons to publish your work in *JAN*:

- High-impact forum: the world's most cited nursing journal, with an Impact Factor of 2.561 – ranked 6/123 in the 2019 ISI Journal Citation Reports © (Nursing; Social Science).
- Most read nursing journal in the world: over 3 million articles downloaded online per year and accessible in over 10,000 libraries worldwide (including over 6,000 in developing countries with free or low cost access).
- Fast and easy online submission: online submission at <http://mc.manuscriptcentral.com/jan>.
- Positive publishing experience: rapid double-blind peer review with constructive feedback.
- Rapid online publication in five weeks: average time from final manuscript arriving in production to online publication.
- Online Open: the option to pay to make your article freely and openly accessible to non-subscribers upon publication on Wiley Online Library, as well as the option to deposit the article in your own or your funding agency's preferred archive (e.g. PubMed).