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CONCEPT REVIEW: SECOND TRAUMATIZATION AND THE ROLE OF A PERIOPERATIVE ADVANCED PRACTICE NURSE

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ABSTRACT

Trauma is inherent in the lived experience of perioperative clinicians. The human cost of these experiences remains, however the hum, mostly unrecognized and shrouded within the Operating Room (OR). Second traumatization describes the phenomenon that clinicians are vulnerable to personal and professional destabilization following exposure to a critical event. Events can include: a medical error, traumatic case, or unanticipated patient outcome. While this phenomenon has been recognized in a variety of disciplines, including nursing, medicine, social work, and psychology it has received limited attention in the perioperative context. A concept review of second traumatization is necessary to understand the experiences of perioperative clinicians caring for victims of critical events.

This paper examines two intersecting concepts: vicarious traumatization and second victimization.

Vicarious traumatization is a concept coined by psychologists to address the phenomenon that individuals working with victims of trauma can absorb disruptive psychological effects that can persist over time.

Second victimization was originally proposed by a physician and used to describe situations in which clinicians suffer due to their perception of perpetuating an adverse event through a medical error. Over time the concept of second victimization has expanded to include not only those who might feel at fault but also any clinician involved in the adverse event.

Although these concepts originated from discipline specific research, both are pertinent to the high-risk, emergency, and interdisciplinary elements of OR care. Considering both victimization and traumatization allows for the development of an overarching understanding of the concept of second traumatization in perioperative contexts.

The purpose of this paper is to present a concept review of second traumatization. The intention of a concept review is to utilize pertinent literature to analyze, define, develop and evaluate a concept which is relevant to the nursing profession. While many

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frameworks exist for concept analysis, Rodger's Evolutionary Method considers the contextual elements and growth of a concept, recognizing that it adapts in different circumstances. By defining second traumatization my hope is that it will allow nurses to recognize the phenomenon in practice and engage in initiatives in an effort to mitigate harm.

INTRODUCTION

Trauma is inherent in the lived experience of perioperative clinicians, however the human cost of these experiences remains unrecognized and shrouded within the Operating Room (OR).[1] The OR is an environment involving complex care, as choreographed by a number of clinicians, that is interwoven with the universal goals of life preservation.[2] Due to the atypical nature of therapeutic patient-clinician relationships, inadequate consideration has been given to the professional and personal impacts on staff when caring for victimized patients.[3,4] The purpose of this concept review is to examine the available research describing the physical, psychological and social experience of clinicians following involvement in a critical event and to define this phenomenon. Reviewing the concept of second traumatization will illuminate the unique experiences of perioperative clinicians and the potential consequences for patients, clinicians and health care organizations.[5]

Rodgers' Concept Analysis will be used as a guiding framework to identify the evolution of second traumatization.[6] While similar to a literature review, a concept review captures data with the intention of defining a concept and presents findings according to a 7-phase framework. Tofthagen and Fagerstrøm maintain that "concept development is a necessary prerequisite for meaningful basic research."[7] As per Rodger's method, (1) a real-life model case will be introduced to provide context for exploring the concept of second traumatization. The author will (2) explore the evolution of the phenomenon, considering two surrogate terms – vicarious trauma and second victimization – and (3) identifying related terms. Using this framework, (4) the sample section will be defined and dictate the data collection process. In the analytic phase, the collected literature will be distilled to (5) define second traumatization and its antecedents, (6) attributes and (7) consequences.

The Advance Practice Nurse (APN) role will be highlighted as a potential avenue for delivering supportive interventions as well as building clinician and organizational resilience.[8] The APN role was selected because, although it has been widely involved in a variety of practice environments, its value has not been thoroughly explored in perioperative contexts. Recognizing the APN role as an advocate for victims of second traumatization could initiate a conversation about extending advance practice competencies to perioperative nurses.

Through this review the author illuminates the reality that second traumatization results in emotional, physical, cognitive, and behavioural attributes, potentially destabilizing clinicians both professionally and personally. Unresolved symptoms can result in long-term effects, insidiously victimizing not only clinicians but also putting their patients and organizations at risk. The hope is that exploring second traumatization will encourage victim acknowledgment, development of supportive resources and continued advocacy for the health of patients and clinicians.

Real Life Case Scenario

A patient requiring emergency surgery is rushed to the OR for a craniotomy to evacuate a bleed resulting from an injury perpetrated by the patient's son. Surgical care is efficiently mobilized by the perioperative team of the surgeon, anaesthesiologist, and nurses. During the surgery the patient goes into cardiac arrest. The calm and controlled atmosphere that typically characterizes the OR is replaced by a sense of urgency and chaos. Every method of resuscitation is attempted while efforts

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1. American Heart Association. "Healthcare workers' radiation exposure tied to range of health problems." ScienceDaily. ScienceDaily, 12 April 2016.

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are made to protect the exposed cranial matter. When all possible life-saving interventions are exhausted, the anaesthesiologist pleads with a silent room, requesting suggestions or unexplored options. Before time of death is declared, the anaesthesiologist kneels next to the patient and whispers apologies for the failed care, the awful series of events, and the patient's death.

Now with a disbanded purpose the team takes a breath and notices their surroundings. Blood pools beneath the surgical bed, the crash cart is splayed open and the surgical drapes and equipment are in disarray. The patient is victim to a number of traumatic injuries – her open skull, broken ribs, battered body – some of which are attributed to the interventions provided by the perioperative team. The team dissolves and disperses. The surgeon speaks to the family, the anaesthesiologist documents the incident, and the nurses gently tend to the body. Regular care is compromised by the criminal nature of this case, leaving little latitude for the team to facilitate family support or post-mortem care. Staff are left exhausted with their energy and resources depleted. In the weeks and months following this death the surgeon feels angry at the anaesthesiologist, constantly recalling the event, and refusing to work together in future. The anaesthesiologist experiences stress, feels isolated from colleagues, and lacks confidence. The nurses have difficulty coping with their grief. They experience recurring images of the patient and an aversion to working on similar cases. The fractured team moves forward, cares for future patients, and attempts to ignore this traumatic experience.

The Evolution of the Concept of Second Traumatization

The concept of second traumatization has been examined from the perspective of multiple clinicians but much of the research is specific to various disciplinary silos.[9] Because of this there is limited consensus on terminology and a restricted understanding of antecedents and outcomes associated with second traumatization. Two branches of surrogate terms have developed in the literature generated by separate disciplines but echoing similar themes.[10] Vicarious traumatization was first identified in therapists who empathetically engage with their clients and vicariously experience their symptoms of physical and psychological trauma.[11] Secondary victimization explores the experiences of nurses and physicians involved in caring for patients victimized by errors or adverse events.[12] Researchers identified three spheres of victimization resulting from adverse events: primarily the patient and family, vicariously the clinicians, and subsequently the organization.[5] Clinicians have been

described as 'second victims' in that they are individuals who are indirectly exposed to critical events and vicariously traumatized while caring for the primary victims.[4,10,13] OR staff are uniquely vulnerable to both vicarious traumatization and secondary victimization due to the inherently traumatic nature of surgical care.[4] Perioperative environments are fraught with traumatic events, compounded by the invasive nature of procedures conducted by the surgical team.[5] The complexity of interventions and dependence on effective team functioning creates a tenuous foundation for patient safety in chaotic and traumatic situations.[2] Second traumatization also merits examination as a cycle in that it positions clinicians to become more vulnerable to future trauma and can create a culture for errors and adverse events. This combination of features provides the rationale to include both vicarious traumatization and second victimization as surrogate terms.

Identifying related Terms

As per Rogers' method, terms related to the concept of second traumatization were identified. Some related concepts that are often incorrectly attributed to second traumatization were excluded from the data collection based on their definitions. Compassion Fatigue (CF), Burnout and Posttraumatic Stress Disorder (PTSD) are terms that have similar triggers, symptoms, or consequences to second traumatization and may potentially develop in conjunction.[16]

CF is described as a decreased ability to provide compassionate care resulting from exhaustive, empathetic patient experiences.[17,18] Although exposure to indirect traumas can escalate manifestations of CF, it is not necessarily instigated by a critical event and can result from a more gradual onset.[19] Secondary trauma is similarly related to the phenomenon of Burnout as it can contribute to the experience but is associated with different antecedents.[20] Burnout is often attributed to organizational pressures such as staff tensions, role ambiguity, and increased workload.[21] The definition of PTSD has been expanded to include indirect traumatic experiences which may capture the long term consequences of victimized clinicians.[22] The symptoms of PTSD are intrusive images of the traumatic incident, avoidance and disrupted thinking.[23] Symptoms are similar enough that in unresolved cases staff may not meet the criteria for PTSD diagnosis and are, instead, classified as experiencing secondary traumatic stress.[16] Although these concepts are relevant to perioperative contexts and are associated with similar symptoms they are not equivalent to the vicarious and traumatic scope of second traumatization.

Sample Selection and Data Collection

Using Rodgers' Evolutionary Method of Concept Analysis the author collected data using a systematic approach incorporating the interdisciplinary, sociocultural, and contextual features of the phenomenon.[6,7] Based on conceptual definition of second traumatization and the population of interest in this study three databases were identified as valuable for the literature review: CINAHL, MEDLINE and PsychINFO. Three comprehensive searches were completed in November, February and March 2017 based on the researcher's evolved understanding of the concept. A similar search method was used with slight modifications made to meet the unique features of each database. Four truncated keywords ("vicarious trauma*", "second* victim*", "second* trauma*" and "vicarious victim*") were identified to capture the phenomena of vicarious traumatization and second victimization. Due to the lack of terminological consensus and varied spellings, this would allow for similar key words such as "secondary victimization", "vicarious traumatisation" and "secondary traumatic stress" to be identified.

234 articles were identified using Medline, 95 articles using CINAHL and 189 using PsychINFO. Inclusion criteria stipulated English, primary sources pertaining to interdisciplinary team members relevant to the OR context (nurses and physicians) and based in tertiary care settings. Exclusion criteria included non-English secondary sources, literature exploring disciplines where perioperative staff are not represented, cases embedded in primary care facilities, and articles exploring the legal issues related to clinician victimization. Articles that used CF, Burnout, or PTSD interchangeably with the term second traumatization were also excluded.

Literature was not limited by date or publication type and included grey literature, editorials, and professional publications.[6] Duplicates were removed and articles were categorized based on their relevance to vicarious traumatization (17 articles) and second victimization (15 articles). Collected materials are representative of all perioperative disciplinary perspectives and exceed the minimum requirement of articles, to perform a concept analysis, as stipulated by Rodgers.[6]

Analytic Phase:

Definition of Second Traumatization and Antecedents

Second traumatization in an OR context develops when a clinician is indirectly traumatized while caring for a patient that is a victim of a critical incident.[24] The antecedent in perioperative environments, a critical event, is when the patient is a victim of physical or emotional trauma, an unexpected adverse event, or a medical error.[5,9,10] Examples provided in the literature are patients that are victims of physical violence and arrive to the OR physically and emotionally traumatized by assault.[23] Intraoperative deaths are also considered antecedents of second traumatization because they are unexpected and adverse surgical events.[8] Medical errors, a dangerous reality embedded in the construct of perioperative care, are another subset of critical events which directly implicate

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the patient and indirectly traumatize the involved clinician.[9] In the OR these types of critical events are tightly interwoven. Emergent surgeries are a response to significant physical and emotional trauma and can result in chaotic care that impacts on patient safety.[4]

Attributes

Among perioperative professionals, including nurses, surgeons and anaesthesiologists, there is consensus on the emotional, physical, cognitive and behavioural attributes of second traumatization.[22] Emotional attributes have been described as stemming from stress which is characterized by shock, anxiety, guilt, grief, remorse, fear, shame and anger.[24,25] Physical manifestations are attributed to psychosomatic symptoms such as fatigue, nausea, dizziness, hypertension, tachycardia, and muscle tension injuries.[9,20] Cognitive attributes include difficulty concentrating, decreased confidence, preoccupation with traumatic events, hyper-vigilance, and memory loss.[12,22] Behavioural attributes have been categorized as social withdrawal, difficulty sleeping, self-destructive behaviours, and decreased job satisfaction.[26,27] Research stipulates that these dimensions are linked. Experiencing emotional symptoms such as grief and anger can result in tachycardia, difficulty concentrating, and decreased job satisfaction.[28]

There is an overarching agreement that the concept of second traumatization is an individualized phenomenon, influenced by context, time, experiences, and personal characteristics.[9] Literature also suggests a cumulative effect in that clinicians who are experiencing attributes of a previous trauma are vulnerable to future traumatization.[22,28] This is supported by the Constructivist Self Development Theory which describes a traumatic reaction as a reflection of an individual's ability to adapt based on their historical experience.[17,29] These attributes are most often experienced for short periods of time (days to weeks) but can result in long-term symptoms that last months or years.[9,24]

Consequences

The consequences of second traumatization are the culmination of emotional, physical, cognitive, and behavioural attributes in conjunction with the coping mechanisms and past experiences of the individual.[30]

Three trajectories of consequences have been highlighted by Scott and colleagues. In the first the clinician can experience positive outcomes that include gaining a sense of perspective, becoming enlightened, and moving on.[10] These outcomes have been attributed to increasing a clinician's motivation to gain knowledge and skill to prevent future critical events.[25,31,32] The psychology community coined the term 'vicarious resilience' to describe the process of learning and absorbing coping strategies through meaningful engagement with traumatic experiences.[33]

Another possible consequence is that the clinician will cope but still experience unreconciled attributes of indirect traumatization.[10] These clinicians report experiencing ongoing stress and preoccupation with events that impacts their ability to perform professionally and on their personal health and relationships.[5,23,26]

The third outcome is clinicians who are unable to reconcile traumatization and subsequently leave their professional context by changing roles, moving organizations, or abandoning their profession.[24,27,28] This outcome exemplifies the third sphere of victimization when the organizations suffer both the human and fiscal costs of unreconciled traumatization. Negative consequences can be characterized by alcohol or drug abuse, depression, and suicidal ideation.[4,22,34] Scott et al., described consequences as being "life altering" for all professions regardless of discipline, gender or professional experience.[10] Consequences have significant implications for patients and families who may receive compromised care but also for the destabilized clinicians who are increasingly vulnerable to future trauma.[35]

Placing APNs at the centre of this program would blend multidimensional nursing skills with advanced competencies in order to improve delivery and effectiveness of care.[40]

APN Role and Competencies

An Advance Practice Nurse (APN) is uniquely positioned to mediate the occurrences and effects of second traumatization and to have a positive impact on the health and safety of patients, clinicians, and organizations. APNs have the potential to be involved in two phases of interventions – the initial rapid-response and the development of preventative programs.[9] These strategies are tailored to perioperative environments but could also be valuable in other departments.

The concept of a rapid-response team has been developed in many American states in response to second traumatization and its destabilizing effects on clinicians.[5,36] Examples include the forYOU program at the University of Missouri Health Care, John Hopkins' Resilience in Stressful Events (RISE) Program, and the 'YOU Matter' initiative driven by The Nationwide Children's Hospital in Ohio.[37,38,39] Volunteer clinicians, embedded in units, are educated and charged with identifying and referring colleagues suffering from exposure to critical events. For example, the forYOU program includes physicians, nurses, social workers, respiratory therapists and other allied health members.[37] Individuals receive peer or professional support to navigate the attributes of second traumatization and mediate negative consequences.[9]

Placing APNs at the centre of this program would blend multidimensional nursing skills with advanced competencies in order to improve delivery and effectiveness of care.[40] An APN with a perioperative background would be able to relate to the experiences of traumatized perioperative staff and to tailor therapeutic interventions to the individual's context and needs.[36] These nurses have the ability to collaborate and consult with a range of interprofessional team members and to mobilize the supports necessary based on the unique client assessments and individual traumatic scenarios.[41] In collaboration with other team members (e.g., physicians, allied health, administrators) APNs could facilitate team-debriefing sessions that have been shown to alleviate symptoms and improve interprofessional relations following a critical event.[23] They could also provide assistance in disclosing adverse events to families which is an anxiety-provoking burden mandated by hospitals.[24,34] An APN could provide the leadership required to develop and sustain this intervention, educate unit volunteers, provide direct clinician care, and engage with organizational stakeholders.[9,42]

APNs could also develop and implement preventative interventions to reduce the occurrence of second traumatization. Educating perioperative staff about the antecedents, attributes, consequences, and coping mechanisms will help identify potential risk of victimization and encourage proactive coping.[5,24] APNs could be involved in the review process for adverse events and errors in order to analyze the potential for improvement in staff functioning and policy-based processes.[12] To support these interventions and discover future strategies, APNs could engage in research and quality initiatives to develop effective programs and gain support from organizational leadership.[43] Embedding these interventions in the fabric of perioperative programs could lead to cultural changes by removing the expectation of perfection from surgical care and creating an opportunity for staff to acknowledge the impact of critical events.[4,9,30]

Conclusion

As depicted in the Real Life Case Scenario, second traumatization commences with exposure to a patient who is a victim of a critical event or compounding traumatic experiences.[44] Staff become fragmented, with each experiencing different attributes of secondary trauma, and generally receive little support or acknowledgement.[4] Experiences like this can have long-term and varied consequences: the anaesthesiologist could resign from the hospital, the nurses could provide a

compromised level of care in future, and the surgeon, due to fear of retribution, could be motivated to improve his skills.[10] These outcomes have significant implications, not just for the suffering clinicians but also for future patients who are at risk of receiving decreased quality of care and jeopardized safety.[45]

Empowering an APN to develop a second traumatization program could change the trajectory for victimized clinicians. The team in the real-life case would be recognized as potential victims, given the opportunity to participate in a team debrief, and receive long-term support.[27] These staff could develop an enhanced understanding of their experiences, recognizing the attributes as a part of a normative process, and engage in coping activities.[46] Rather than allowing vicarious trauma to inhibit their performance, and undermine team functioning, clinicians could receive support and improve their personal health, care delivery, and the safety of future patients.[9] With preventative care clinicians could be positioned to recognize traumatic situations and harness their victimization as a motivating force to engage in quality improvement initiatives.[42]

This concept review is necessary to understand the significance of second traumatization in a relatively unexplored practice environment.[42] Further research is necessary to develop a stronger understanding of the breadth and depth of this concept and continue to advocate for victim recognition. An APN is positioned to engage in the required research, design a contextually-tailored program and lead clinician support teams. Prioritizing these initiatives demonstrates a strategic investment in clinician wellness as well as continued commitment to a culture of safety.

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