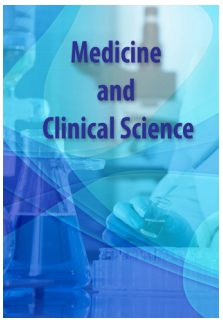
Medicine & Clinical Science

Original Article



Second Victims and Patient Safety: A Scoping Review

Kitani Kaile Lorena[1], Amato de Souza Beatriz[1], Estevam de Avila Fernanda[1], Garcia Martins Isadora[1], Dias Vergílio Jorge Fernando[2] and Rossi Ribeiro Elaine[3]

[1]Medicine Course Student, Faculdades Pequeno Príncipe - Curitiba-PR
[2]Master's Degree in Health Sciences Teaching Programme, Faculdades Pequeno Príncipe - Curitiba-PR.
[3]Reseaarch and Lecturer in the Health Sciences Teaching Programme, Faculdades Pequeno Príncipe-Curitiba-PR.

Correspondence

Rossi Ribeiro Elaine.

Via Borgo Giannotti 488, Lucca, LU, Italy - 55100

Av. Iguaçu, 333 - Rebouças, Curitiba - PR, 80230-020

Tel: (39) 3476629530

E-mail: elaine.ribeiro@fpp.edu.br

- Received Date: 10 Feb 2024
- Accepted Date: 16 Feb 2024
- Publication Date: 19 Feb 2024

Abstract

Justification: Health professionals perform their duties in environments that require complex care, and avoiding possible complications is the main focus, however, given human fallibility, adverse events sometimes become inevitable, and when this occurs, the effects go far beyond the individual who suffered the damage directly, as there is an indirect effect on the health professionals involved, who are considered "second victims". Considering that the likelihood of these professionals suffering physical and psychosocial damage because of the harm caused to the patient is relatively high, it is essential that studies are developed to provide adequate support for these professionals. **Objective:** To review the national and international literature to identify existing notes on the support given to health professionals in the role of second victim. **Results:** 27 articles dated between 2011 and 2021 were analyzed. The country with the most publications was the United States of America, followed by Canada and Spain, and quantitative methods were prevalent. The studies identified important strategies, such as sensitivity, empathy and adequate support, effective communication, review of adverse events, social and emotional support in a trusting environment, individualized follow-up and a support network. By adopting these strategies, it is possible to provide effective and compassionate support, helping them to face and overcome the emotional and psychological challenges associated with adverse events or medical errors. **Conclusions:** In view of the impacts faced by healthcare professionals in the role of second victim, a sensitive approach to the issue is needed, and it is essential to recognize and address the emotional needs of professionals with support strategies, psychological support and resilience education programs. And so, promote a culture of safety in healthcare institutions, encouraging constant learning and welcoming a just culture.

Keywords

Medical Error; Adverse Event; Health Professional; Second Victim

Introduction

The occurrence of errors and adverse events in the healthcare environment can have a significant impact on the health and well-being of patients. In addition to patients, the healthcare professionals involved can also be affected emotionally and psychologically, playing the role of "second victim" [1]. Understanding and implementing appropriate management protocols for healthcare professionals in this specific context is extremely important to ensure a healthy and safe working environment for the second victim.

A study carried out in 2018 highlights the importance of such management protocols, emphasizing that the adoption of support strategies is fundamental to helping healthcare professionals deal with the emotional impact of medical errors [2]. In addition, the authors highlight the need for an organizational culture that promotes learning from mistakes and provides resources for the recovery of second victims [3].

Thus, the implementation of management protocols for healthcare professionals in the role of second victim becomes essential, based on the evidence presented by the authors. These protocols aim to promote a safer and healthier working environment, guaranteeing the wellbeing of both healthcare professionals and patients.

The experience of being a second victim can lead to negative consequences such as stress, depression and even affect the quality of patient care. This realization highlights the need to implement effective support strategies for healthcare professionals involved in medical errors [4].

Another study emphasized the importance of implementing management protocols that offer emotional and practical support to second victims. The authors argued that creating a safe and supportive environment is key to helping healthcare professionals recover from traumatic experiences and avoid long-term negative effects [5].

The experience of second victims among Brazilian healthcare professionals was explored. The authors emphasized the need for

Citation: Kitani KL, Amato de Souza B, Estevam de Avila F, Garcia Martins I, Dias Vergílio JF, Rossi RE. Second Victims and Patient Safety: A Scoping Review . Med Clin Sci. 2023;6(1):003.

support and training strategies to help professionals deal with the emotional consequences of medical errors. They pointed out that the implementation of effective management protocols can contribute to improving patient safety and the quality of care [6].

Therefore, based on the international evidence presented, the importance of protocols for managing the reception of healthcare professionals in the role of second victim is evident [4-6]. In this context, the question arises: What does the national and international literature indicate about the support offered to healthcare professionals in the role of second victim?

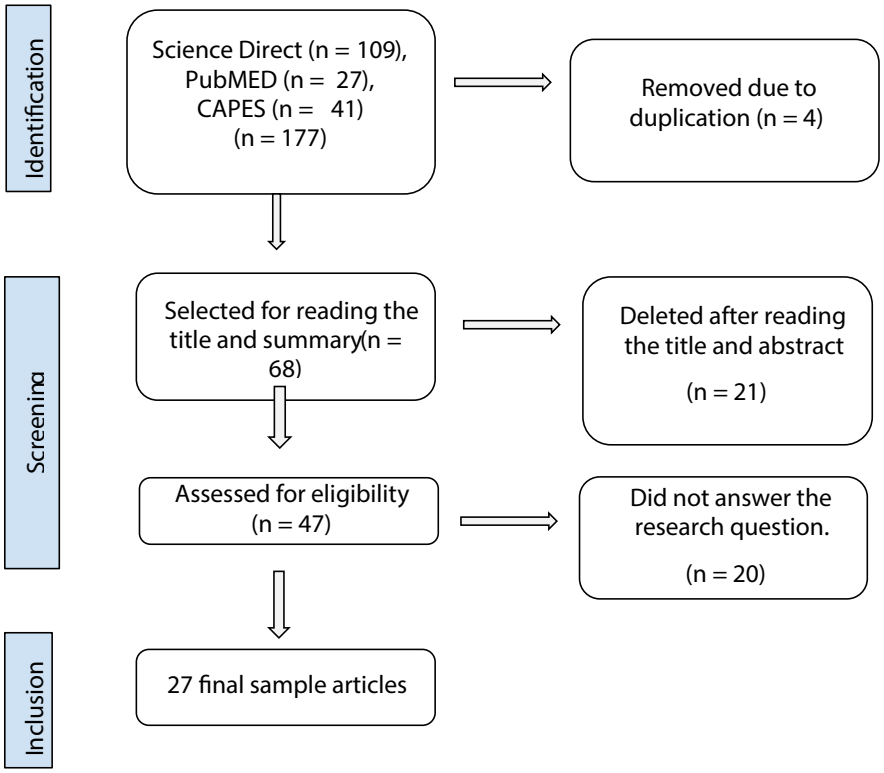
To answer this research question, the aim is to map out the main strategies proposed for healthcare professionals in the role of second victim, as described in the national and international literature, in order to learn about the type of support and emotional support offered and its effectiveness in promoting a safe and healthy working environment.

Methodology

This study is a scoping review based on the methodological framework of the Joanna Briggs Institute (JBI) and is based on research into support for second victims. The PCC mnemonic was used (P = Participant, C1 = concept and C2 = context), with P = health professionals in the role of second victim, C1 = support offered and C2 = national and international literature, thus determining the research question: "What does the national and international literature indicate about support for health professionals in the role of second victim?".

The descriptors were obtained from the DeCs (Health Sciences Descriptors) platform. The descriptors "second victim" and "medical errors" were used in the Science Direct database, "health practitioner" and "adverse event" and "medical error" and "safety" in CAPES (Portal de Periódicos da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) and "second victim" and "adverse errors" in PubMED. The inclusion criteria selected scientific articles, systematic and integrative reviews published from 2011 onwards, in English, Portuguese and Spanish, all located in full and open access.

The search was carried out by five independent reviewers, following the JBI method and the Meta-Analyses for Scoping Reviews (PRISMA-ScR) extension [7] with the research protocol registered with the Open Science Framework OSF on the https://doi.org/10.17605/OSF.IO/NV28R register. Initially, the title and abstract of the articles were excluded, and tables were then drawn up containing the main information on the articles, including title, year of publication, study design, country of origin and abstract. Thus, after initial exclusion, 27 final articles were determined to make up the final sample of this study. The selection of articles is shown in Figure 1.



Source: The authors, 2023.

***Figure 1**. Selection of articles for the scope*

Results and discussion

The "second victim" is understood to refer to the healthcare professional who, after participating in an adverse event, becomes a victim of the associated psychological trauma. These events can range from medical errors to unexpected outcomes of procedures or surgeries. Emotional pressure and guilt can weigh heavily on these professionals, jeopardizing not only their mental health, but also affecting their ability to provide quality care. In this context, we will discuss the results obtained using the temporal aspect of the 27 articles found.

The year 2021 saw the highest number of publications, with 22.22 per cent, followed by 2020 with 18.51 per cent, then 2018 with 14.81 per cent. The years 2013 and 2015 obtained 7.40% and 2011, 2012, 2014, 2017 and 2019 3.70%, showing a growing search and interest in the subject.

In the period between 2011 and 2021 in the final sample, the country with the highest number of articles was the United States of America with 37.03%, followed by Canada and Spain with 11.11% each, Belgium, England and Switzerland with 7.40% and Norway, Brazil and Iran with 3.70% each. As for the methods used in the articles in the final sample, quantitative studies accounted for 29.62%, followed by qualitative studies and integrative reviews, each with 25.92%, followed by systematic reviews with 7.40% and others with lower percentages.

A review analyzed how patient safety has become a matter of public interest in recent years and described strategies to support and empower teams to provide safe, high-quality care. Initiatives such as the WHO checklist and NatSSIPs incorporate safety behaviors into daily practice. For organizations to become safer, it is necessary to cultivate a culture of safety, as well as encouraging employees to feel safe to openly report problems and errors [8].

An integrative review of six articles states that the phenomenon of the second victim is a new topic, and that although hospital programs on this phenomenon already exist, it often goes unidentified due to a lack of knowledge on the part of hospital services. Among the medical specialties, the authors pointed out that pediatrics stood out as a cause of second victims, mainly because it deals with delicate situations, and among the consequences of the occurrence of the second victim episode are psychosocial and physical suffering, increased absenteeism rates and turnover intentions. The authors suggest that the programs that worked with a definition of peer support showed positive results, mainly because they addressed the main demand of second victims, which is to have support to be able to discuss the traumatic events that occurred. They also point to the need to expand programs in institutions aimed at reducing the occurrence of such events, as well as a culture of support for the professionals involved [9].

After interviewing healthcare professionals in an Intensive Care Unit in the United States to assess the impact of implementing a support program for second victims, a study showed that knowledge about this event increased professionals' awareness and perception of the issue and of the availability of support for healthcare professionals involved in stressful or traumatizing clinical events [10].

A qualitative study, on the other hand, showed that among the barriers mentioned by workers were fear of confidentiality, fear of judgement from their own colleagues, fear of being blamed and a lack of understanding about the support options available. The authors state that support can be facilitated through team meetings, professional counselling, peer support and individual conversations. In addition, many professionals reported that they had benefited from additional mental health resources such as support from psychologists and psychiatrists. Like the aforementioned article [9], the need for and importance of good leadership at the head of these programs is highlighted, with the creation of briefings and debriefings routines, with the aim of creating good systems to provide second victims with the necessary support [11].

Another study, analyzing the occurrence of the second victim phenomenon, presents some of the consequences that can affect the workers involved, some of which are: post-traumatic stress disorder, poor job performance, depression and suicide [12].

In this survey, 178 Canadian radiotherapists were interviewed, showing that there is a lack of awareness of the phenomenon on the part of professionals, although 86% of those interviewed reported having already experienced the phenomenon. Also noteworthy is the lack of available support measures offered by the institutions themselves [13].

According to a survey in a specialized pediatric hospital in the USA, 358 nurses who worked in direct contact with patients were interviewed, corroborating the thesis that punitive cultures can worsen the perception of those involved and cause more suffering. It is therefore important to reduce the punitive nature of responses involving errors and experiences of the second victim, culminating in positive implications for the well-being of the team and patient safety [14].

A literature review analyzed 10 articles with the aim of identifying support intervention strategies for second victims and showed that errors are likely to occur and are not always the direct fault of the health service. It also corroborates that support for health professionals, especially nurses, has an impact on the quality and safety of care. When the second victim receives adequate care, suffering can be reduced. Support can be at an organizational or collective level. This is why it is important for organizations to have well-structured adverse event response plans. Institutions must be aware of the impact an event can have on their healthcare providers and how they can support them. When nurses don't receive enough support after adverse events, it can make them think about leaving their jobs [15].

In a study which set up training for 149 "peer supporters" for second victims, it was observed that peer supporters can be trained in short sessions and sharing personal stories about the suffering of staff members can help. And they emphasize that supervisor support was of high importance, followed by peer support [16].

The program called "NO Harm Patient Safety" demonstrated that actions carried out in a healthcare organization can reduce error rates and involve all professionals in strengthening the values and strategic mission. The authors point out that the interventions carried out in the Program were effective, as they used a multifaceted approach with the participation of leadership, and conclude by saying that there were improvements in patient safety outcomes [17].

Human error is inevitable and less experienced doctors are more susceptible to such occurrences. This is corroborated by the literature which states that medical error is common and junior doctors are more vulnerable to mistakes. The most serious errors occur in the emergency department, operating theatres, and the intensive care unit. Improvements in patient safety are mainly the result of organizational and individual learning, especially with regard to trainee doctors who present an increased level of risk [18].

The same researchers, in a literature review after evaluating 52 articles, concluded that errors are caused by faulty systems, processes and conditions that lead people to make mistakes or fail to avoid them and not by reckless behavior, being

involved in this process has a major impact on the healthcare professional. Being involved when things go wrong can have devastating consequences, both personally and professionally. The individual involved when a mistake has been made can feel responsible and emotionally traumatized by the adverse event. Among the consequences are feelings of guilt, shame, anger, loss of confidence, stress, anxiety and depression. In the absence of support, individuals can become angry, act defensively or project guilt. And in the long term, it can get worse and lead to doctor burnout and possible alcohol or drug dependency [18].

In a descriptive study, it was stated that supporting the second victim goes beyond the ethical and moral principle of caring for those who care for the health of others, with the ultimate goal being to reduce risks for the patient and therefore improve their safety [19].

Surgical residency programs are a source of a large number of errors, as the qualitative study shows, and this incidence is related to the fact that communication between senior surgeons and surgical trainees is critical and has implications for patient safety. Senior surgeons should remain aware of the possible psychological effects of trainee exposure to catastrophic errors, and discussions about the sources of error and strategies to prevent similar errors should be initiated by senior surgeons outside of morbidity and mortality rounds [20].

With the aim of managing consequences and adverse events, this study concluded that after incidents occur, the best way to deal with the consequences is openly, which they report when patients and relatives clearly expect open disclosure after a critical incident and that one of the main motivations for taking legal action is the lack of reliable information and perceived lack of respect and feelings of abandonment. A systematic approach to managing the consequences of critical incidents should be an integral part of any patient safety strategy [21].

Another study also adds that after incidents, understanding and compassion are needed; healthcare organization leaders must understand the psychological urgency that occurs when a professional inadvertently causes injury to a patient. Compassion is needed so that second victims can overcome their pain. Effective support, second victims have the right to receive psychological support applied in a professional and organised manner. Transparency and the opportunity to contribute to learning. Second victims have the right to contribute to the organization's knowledge of the error and also to share important causal information. Offering second victims the opportunity to help prevent future errors helps them overcome the problem [22].

This information is corroborated by an exploratory study, which states that the following three pillars should be considered by education committees, institutions and hospitals. Firstly, a patient safety incident should be more open to discussion. Supervisors should encourage students to discuss incidents openly. Secondly, students need effective education and background on what they are and how they should deal with their feelings. In addition, more practical tips need to be provided on how to start a conversation with a patient after an incident [23].

Second victim support is generally prevalent, but often in an unstructured way and this lack of methodology increases the risk that, following adverse events, both the quantity and quality of support provided to healthcare professionals will be insufficient [24].

In view of the scarcity of studies on the national scene, it is imperative to develop research aimed at identifying the prevalence and experience of healthcare professionals in the condition of second victim, in order to get to know the reality of the phenomenon in Brazilian healthcare organizations and structure feasible support strategies for our context [25].

A survey was carried out with the aim of raising awareness of the second victim phenomenon and its impact on healthcare workers. The article highlighted ways of providing support to second victims considering 5 factors of human-environment interaction (location, place, human interactions, movement and region), since addressing this interaction helps to individualize measures in support systems [26].

This study considers the resources available for health workers to give and receive support after an adverse event has occurred, respecting the characteristics of work based on human ideas and actions, and should individualize the way in which support would be exercised. Regarding human interactions, the authors suggest that the hierarchy of professions be broken down in order to reduce the burden on certain professionals. The movement is related to the transition of care between professionals within a given environment, avoiding adverse effects on the patient. In short, the focus of the article cited is on actions to prevent scenarios that lead to second victims [26].

A case study aimed to develop and assess the feasibility of a support program called RISE (Resilience in Stressful Events) in a hospital in the United States, which aims to support healthcare workers in times of stress with patients (e.g. adverse events, death, error, unexpected prognosis, and unintentional trauma). After a certain event, the second victim could call the multi-professional team via a pager, which must be answered within 30 minutes and then a meeting arranged within the following 12 hours. The aim of the meeting is to provide the second victim with psychological support, focusing on emotions rather than the details of the incident itself. Finally, the on-call team should offer referrals to assistance and counselling resources for the case presented [3].

All meetings should be confidential, except in the event of a threat to the safety of the second victim or third parties. The study showed that the most frequent RISE callers were nursing professionals. In addition, the majority were contacted due to adverse events and an inability to deal with the emotions resulting from such events. Despite the development of the program, RISE was only activated a few times within the first year of its launch [3].

In a double-blind trial aimed at exploring the concept of healthcare professionals as second victims, the author discusses the term "victim" as it can diminish the harm caused to the patient, or first victim. Although the term victim helps professionals deal with adverse effects, it can be considered a barrier to ensuring patient safety. He also mentions the phases of recovery for the second victim (response to the trauma, intrusive reflections, restoring integrity, supporting the investigation, obtaining emotional support and overcoming the event) and the importance of understanding and accepting each phase [27].

To support the second victim, it is necessary to consider what resources and services are available for this purpose, as well as offering support at a general and individual level. Family, friends and colleagues were considered pillars for individual support. Psychological and mental health services are good tools for combating the post-traumatic stress suffered by a percentage of second victims. In view of the above, a website was created by the National Institute for Health Research (NIHR) to help support health professionals suffering from adverse events caused to patients. The website provides information for second victims on the victim's health, well-being, and recovery after the event, as well as information on how to manage such victims [27].

Another systematic review used 16 studies to highlight the types of support available in healthcare organizations, their benefits for second victims, experiences, and implementation challenges. It was possible to note that many programs and organizations to support second victims came from the USA, with a notable lack of this type of intervention in other countries. The challenges identified involved investment time and limited knowledge about the initiative, as well as concerns about medical confidentiality, reluctance on the part of the team to seek help and lack of monetary investment. The authors suggest that, in addition to immediate support programs, there should be longitudinal monitoring in order to verify the applicability of the suggested strategies. Further, they cite the importance of communicating the existence and importance of such a program through websites, social networks and other communication channels, extending training on how to use the program to students in the health field [28].

Un review systematized 16 articles with the aim of analyzing personal and organizational strategies described in the literature to support second victims in the health sector. The authors were able to verify that, in addition to most of the second victims being women and in the nursing field, the greater the damage to the patient, the greater the intensity of the symptoms. Furthermore, identifying the error and its consequences is part of the process of healing from trauma, maintaining a career and helping to develop support for victims. The same barriers cited in other studies were verified in this review, such as short-term follow-up, lack of knowledge on the part of workers about the service and difficulty in trusting that the information provided is confidential. The study states that there is still a lack of research and knowledge on the subject in Latin countries, reinforcing the punitive culture in the face of an adverse event [29].

Translating and applying the SVEST tool with Iranian nurses was the objective of this research. It was possible to verify that the most altered component of the scale was psychological stress, which agrees with studies carried out in other countries. It was found that Iran does not offer adequate support to healthcare workers in the face of adverse events [30].

Analyzing interview findings and discussing the phases of the recovery trajectory of second victims was the purpose of this study. The first stage is called response to the accident, in which the event is detected, and other professionals can be called to assist in the management of the patient once the victim is unable to have coherent attitudes. Next comes the stage of intrusive reflection, in which the second victim relives the moment by questioning other possible outcomes and may isolate himself. The third stage consists of seeking help from trusted relationships (work colleagues, friends, or family members) in order to validate your feelings. The stage of supporting the investigation carried out by the institution is next and causes thoughts about the repercussions on the work. The fifth stage again consists of seeking help. Finally, the stage of overcoming episodes with 3 potential outcomes: abandonment of the profession, survival, or personal development [31].

Survey aimed at presenting the development and psychometric evaluation of the Second Victim Support Tool (SVEST) experience, pointed to an instrument that aims to assist healthcare organizations in implementing and tracking second victim performance. It can also be used as a comparative tool between organizational initiatives. It considers the following topics on a Likert scale: psychological stress, physical stress, support from co-workers, support from supervisors, institutional support, non-work-related support, professional effectiveness, improvement intentions and absenteeism. Therefore, the higher the score, the greater the impact of the adverse event [32].

The consequences of adverse events in healthcare workers can compromise patient safety, as it makes them less confident and can reduce their performance. SVEST was able to verify that one of the responses to the trauma of the second victim is absenteeism. Although most tools focus on the negative consequences of adverse events, it was noted that there were also somewhat positive consequences, as professionals improved on errors and increased attention during procedures [32].

Welcoming a healthcare professional who has been identified as a "second victim", that is, someone who has experienced an adverse event or medical error and is suffering from the emotional and psychological impact, requires sensitivity, empathy and adequate support, in an environment of trust, individualized monitoring and a support network.

Conclusion

Given the analysis carried out after in-depth reading of the selected articles, it can be concluded that the health professional in the role of second victim obstinately needs a sensitive look.

The role played by health professionals is extremely important in promoting and maintaining health, but there are times when they face unexpected challenges that transcend the clinical sphere: adverse events. When a patient experiences an unexpected complication, it is inevitable that the healthcare professionals involved will also be affected emotionally, psychologically, and even physically.

It is essential to recognize and address the emotional needs of healthcare professionals as an integral part of the process of continually improving patient safety. Supportive strategies, such as debriefings, psychological support, and resilience education programs, are crucial to helping these professionals deal with the emotional impact of adverse events.

Additionally, it is imperative that healthcare institutions promote a culture of safety that encourages transparency and continuous learning. This includes creating safe spaces for professionals to openly discuss adverse events without fear of retaliation through just culture.

Recognizing the healthcare professional as a "second victim" not only humanizes the clinical environment, but also contributes to building resilient teams committed to patient safety. By facing the emotional challenges associated with adverse events, healthcare professionals can recover and continue to play their vital role in providing high-quality healthcare. The emotional health of healthcare professionals is intrinsically linked to the quality and safety of the care offered, and investing in the well-being of these professionals is investing in the global improvement of healthcare.

Therefore, we suggest continuing future research on this topic to build new knowledge and encourage the development of institutional programs to protect second victims, with a humanized perspective.

Conflict of interest

We declare that there was no participation of any funding source and there are no conflicts of interest, whether personal, commercial, academic, political or financial, in the manuscript.

References

1. Petersen LA, Brennan TA, O'Neil AC, Cook EF, Lee TH. Does housestaff discontinuity of care increase the risk for preventable adverse events?. Ann Intern Med. 1994;121(11):866-872.
2. Scott SD, Hirschinger LE, Cox KR, McCoig M, Brandt J, Hall LW. The natural history of recovery for the healthcare provider "second victim" after adverse patient events. Qual Saf Health Care. 2009;18(5):325-330.
3. Edrees H, Connors C, Paine L, Norvell M, Taylor H, Wu AW.

Implementing the RISE second victim support programme at the Johns Hopkins Hospital: a case study. BMJ Open. 2016;6(9):e011708.

4. Wu AW, Steckelberg RC. Medical error, incident investigation and the second victim: doing better and being well. BMJ Qual Saf. 2019;28(12):972-975.
5. Waterman AD, Garbutt J, Hazel E, et al. The emotional impact of medical errors on practicing physicians in the United States and Canada. Jt Comm J Qual Patient Saf. 2007;33(8):467-476.
6. Freire M, Trentin C, Simão A, Batista J. "Segundas vítimas": O impacto emocional do erro médico no profissional de saúde. Revista Brasileira de Medicina de Família e Comunidade, 2018; 13(40), 1-8.
7. Tricco AC, Lillie E, Zarin W, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. Ann Intern Med. 2018;169(7):467-473.
8. Donaghy C, Doherty R, Irwin T. Patient safety: a culture of openness and supporting staff. Surgery (Oxford). 2018;36(9):509–14.
9. Werthman JA, Brown A, Cole I, et al. Second Victim Phenomenon and Nursing Support: An Integrative Review. Journal of Radiology Nursing. 2021;40(2):139–145
10. Finney RE, Czinski S, Fjerstad K, et al. Evaluation of a Second Victim Peer Support Program on Perceptions of Second Victim Experiences and Supportive Resources in Pediatric Clinical Specialties Using the Second Victim Experience and Support Tool (SVEST). J Pediatr Nurs. 2021;61:312-317.
11. Christoffersen L, Teigen J, Rønningstad C. Following-up midwives after adverse incidents: How front-line management practices help second victims. Midwifery. 2020;85:102669.
12. Robertson JJ, Long B. Suffering in Silence: Medical Error and its Impact on Health Care Providers. J Emerg Med. 2018;54(4):402-409.
13. Kobe C, Blouin S, Moltzan C, Koul R. The Second Victim Phenomenon: Perspective of Canadian Radiation Therapists. J Med Imaging Radiat Sci. 2019;50(1):87-97.
14. Quillivan RR, Burlison JD, Browne EK, Scott SD, Hoffman JM. Patient Safety Culture and the Second Victim Phenomenon: Connecting Culture to Staff Distress in Nurses. Jt Comm J Qual Patient Saf. 2016;42(8):377-386.
15. Seys D, Scott S, Wu A, et al. Supporting involved health care professionals (second victims) following an adverse health event: a literature review. Int J Nurs Stud. 2013;50(5):678-687.
16. Klatt TE, Sachs JF, Huang CC, Pilarski AM. Building a Program of Expanded Peer Support for the Entire Health Care Team: No One Left Behind. Jt Comm J Qual Patient Saf. 2021;47(12):759-767.
17. Phipps AR, Paradis M, Peterson KA, et al. Reducing Serious Safety Events and Priority Hospital-Acquired Conditions in a Pediatric Hospital with the Implementation of a Patient Safety Program. Jt Comm J Qual Patient Saf. 2018;44(6):334-340.
18. Tevlin R, Doherty E, Traynor O. Improving disclosure and management of medical error - an opportunity to transform the surgeons of tomorrow. Surgeon. 2013;11(6):338-343.
19. Carrillo I, Ferrús L, Silvestre C, et al. Proposals for the study of the second victim phenomenon in Spanish Primary Care Centres and Hospitals. Rev Calid Asist. 2016;31 Suppl 2:3-10.
20. Balogun JA, Bramall AN, Bernstein M. How Surgical Trainees Handle Catastrophic Errors: A Qualitative Study. J Surg Educ. 2015;72(6):1179-1184.
21. Manser T. Managing the aftermath of critical incidents: meeting the needs of health-care providers and patients. Best Pract Res Clin Anaesthesiol. 2011;25(2):169-79.
22. Smetzer J. No abandonemos a las "segundas víctimas" de los errores clínicos. Nurs (Ed española) 2012;30(5):28–31
23. Van Slambrouck L, Verschueren R, Seys D, Bruyneel L, Panella M, Vanhaecht K. Second victims among baccalaureate nursing students in the aftermath of a patient safety incident: An exploratory cross-sectional study. J Prof Nurs. 2021;37(4):765–70
24. Reiser CF, Schwappach D, Schwendimann R. Supporting health professionals after an adverse event in Swiss hospitals: A cross-sectional study. Swiss Med Wkly. 2020;150(25–26):1–9.
25. Regina E, Quadrado S, Maria D, Tronchin R. Segunda Vítima: Uma Revisão De Escopo. 2021;1–12.
26. Gamble B, Gamble KJ. A systems approach to address the impact of second victim phenomenon. Heal Serv Manag Res. 2022;35(2):110–3.
27. Marran JE. Supporting staff who are second victims after adverse healthcare events. Nurs Manage. 2019;26(6):36–43.
28. Busch IM, Moretti F, Campagna I, et al. Promoting the psychological well-being of healthcare providers facing the burden of adverse events: A systematic review of second victim support resources. Int J Environ Res Public Health. 2021;18(10).
29. Kappes M, Romero-García M, Delgado-Hito P. Coping strategies in health care providers as second victims: A systematic review. Int Nurs Rev. 2021;68(4):471–81.
30. Ajoudani F, Habibzadeh H, Baghaei R. Second Victim Experience and Support Tool: Persian translation and psychometric characteristics evaluation. Int Nurs Rev. 2021;68(1):34–40.
31. Scott SD, Hirschinger LE, Cox KR, McCoig M, Brandt J, Hall LW. The natural history of recovery for the healthcare provider "second victim" after adverse patient events. Qual Saf Heal Care. 2009;18(5):325–30.
32. Burlison JD, Scott SD, Browne EK, Thompson SG, Hoffman JM. The Second Victim Experience and Support Tool: Validation of an Organizational Resource for Assessing Second Victim Effects and the Quality of Support Resources. J Patient Saf. 2017;13(2):93-102.