

Impacts of patient safety incidents on nursing: a look at the second victim

Impactos de incidentes de segurança do paciente na enfermagem: um olhar para a segunda vítima Impactos de incidentes de seguridad del paciente en enfermería: una mirada hacia la segunda víctima

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ABSTRACT

Objective: to understand the impacts on nursing professionals as the second victim of patient safety incidents. **Method:** qualitative exploratory-descriptive study approved by the research ethics committee, carried out with 20 nursing professionals at a university hospital in southern Brazil, between November 2021 and January 2022, through semi-structured interviews analyzed from the discursive textual analysis. **Results:** the second victims' feelings categories, demonstrating the presence of negative feelings, with fear being the most recurrent; and impact on the professional path and on the work environment, questioning their ability as a good professional and the choice of profession as being adequate, allowed understanding the impact on the nursing professional. **Final considerations:** the impacts were related to the feeling of guilt for the fact that occurred, self-judgment, judgment by peers and by the patient, fear of the outcome for the patient and the consequences for himself, and doubts about his ability and performance at work.

Descriptors: Nursing; Delivery of Health Care; Patient Safety; Safety Management.

RESUMO

Objetivo: compreender os impactos para os profissionais de enfermagem como segunda vítima de incidentes de segurança do paciente. Método: estudo qualitativo aprovado pelo comitê de ética em pesquisa, do tipo exploratório-descritivo, realizado com 20 profissionais de enfermagem em hospital universitário do Sul do Brasil, entre novembro de 2021 e janeiro de 2022, por meio de entrevistas semiestruturadas analisadas a partir da análise textual discursiva. Resultados: as categorias sentimentos das segundas vítimas, demonstrando a presença de sentimentos negativos, sendo o medo o mais recorrente; e, impacto na trajetória profissional e no ambiente de trabalho, questionando sua habilidade como um bom profissional e a escolha da profissão como sendo adequada permitiram compreender o impacto no profissional de enfermagem. Considerações finais: os impactos relacionaram-se ao sentimento de culpa pelo fato ocorrido, autojulgamento, julgamento pelos pares e pelo paciente, medo do desfecho ao paciente e das consequências para si e dúvidas quanto à sua habilidade e desempenho no trabalho.

RESUMEN

Objetivo: comprender los impactos sobre los profesionales de enfermería como segunda víctima de los incidentes de seguridad del paciente. **Método**: estudio cualitativo, de tipo exploratorio-descriptivo, aprobado por el comité de ética en investigación, y realizado junto a 20 profesionales de enfermería de un hospital universitario del sur de Brasil, entre noviembre de 2021 y enero de 2022, a través de entrevistas semiestructuradas analizadas a partir del análisis textual discursivo. **Resultados:** las categorías de sentimientos de las segundas víctimas han permitido comprender el impacto sobre el profesional de enfermería: indican la presencia de sentimientos negativos, el miedo siendo el más recurrente; el impacto en la trayectoria profesional y en el ambiente de trabajo, ya que los enfermeros cuestionan su habilidad de buen profesional y si ha sido adecuada la elección de la profesión. **Consideraciones finales:** los impactos se relacionaron con el sentimiento de culpa por el hecho ocurrido, el juicio propio, el juicio de los pares y del paciente, el miedo al desenlace para el paciente y las consecuencias para él mismo, y las dudas sobre su capacidad y desempeño en el trabajo.

Descriptores: Enfermería; Atención a la Salud; Seguridad del Paciente; Administración de la Seguridad.

Descritores: Enfermagem; Assistência à saúde; Segurança do Paciente; Gestão da Segurança.

INTRODUCTION

Patient safety "advocates decreasing the risks of unnecessary harm associated with the provision of health care".

Nursing practice is closely linked to care and direct and indirect assistance provided to patients; hence, efforts are needed to ensure care is safer and more effective.

Patient safety incidents are characterized by any deviation from proper health care, harming or imposing risks to patients. An incident can be: a near miss, an event that did not reach the patient; no-harm incident, i.e., the incident reached the patient, but there was no harm; and a harmful incident, also called an adverse event^{1,3}.

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The health professional involved in an incident, traumatized by such an experience or unable to cope emotionally, is characterized as the Second Victim⁴. The reactions of the second victim to an incident can be psychological, cognitive, and/or physical and characterized as unique reactions that impact the social, cultural, emotional, spiritual, and physical areas⁵.

The second victim's response is described in six stages: 1) Chaos and incident response, where the second victim needs to organize thoughts and understand the event; 2) Non-relevant reflections, in which thoughts of fear and dread arise; 3) restoring personal integrity to seek support from peers or a trusted person; 4) withstand the judgment of others, when questions about employability and disciplinary consequences begin; 5) getting help (emotional "first aid") when the second victim raises questions about where and with whom s/he can count on; 6) giving up, surviving or moving on. Giving up is characterized as abandoning the profession or changing the work unit; surviving is to continue one's tasks as expected; and, finally, moving forward when the incident promotes change, improvement, and transformation of the professional activity⁶.

Studies have been conducted in several countries to assess the impacts of getting involved in an incident as the second victim. Such studies adopt a quantitative approach and use the Second Victim Experience and Support Tool (SVEST). Countries include Korea⁷, China⁸, Spain⁹, Italy¹⁰, Brazil¹¹, Turkey¹², Malaysia¹³, Denmark¹⁴, Persia¹⁵ and Germany¹⁶. Health institutions can use SVEST to assess the second victims' experiences and existing support resources⁷. However, there is still a gap in the scientific literature concerning qualitative studies aimed at deepening knowledge about the impacts of becoming involved in an incident from the perspective of second victims¹⁷.

As health professionals involved in an incident are at risk of decreased personal well-being and professional performance, proper organizational and peer support is increasingly considered essential to alleviate personal and professional impacts³. Thus, the importance of this study lies in the need to understand the impacts on nursing professionals of becoming involved in an incident, seeking to devise support programs and policies to heed such a context^{3,18-22}.

It is important to highlight that that nursing professionals are those who provide most of the direct care to patients in the hospital environment and may be subject to greater occurrences of incidents during care. In addition, they are the main members of the clinical team of a hospital, taking care of special care to improve the quality of care and increase patient safety.

Thus, this study aims to understand the impact of becoming a second victim of patient safety incidents from the perspective of nursing workers.

METHOD

This exploratory, descriptive study, with a qualitative approach, was performed at a university hospital (HU) in southern Brazil, where 100% of its care is provided to those covered by the Brazilian Unified Health System (SUS). More than 200 beds are distributed among clinical, surgical, pediatric, maternal and childcare, and intensive care units.

The methodological path was based on the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist²³.

The participants were recruited through a non-probabilistic convenience sampling, i.e., non-randomly. Inclusion criteria were being a nurse or nursing technician working at the institution and being a second victim. Exclusion criteria were being absent due to vacation or sick leave during data collection or being a nursing professional not directly providing patient care.

Data were collected from November 2021 to January 2022, through semi-structured interviews. Close-ended questions were intended to characterize the participants and open-ended questions concerned the object of study. Data saturation determined when to cease data collection. The individual interviews were audio recorded and there was no need to repeat the interview recordings.

The interviews were transcribed verbatim for later verification. The reports were identified with the letter "P" (professional) and a sequential number (1, 2, etc.) regardless of the worker's specific profession.

Data were treated according to the discourse textual analysis, which consists of a three-stage process: deconstruction of the text (unitarization); establishment of relationships (categorization); and new understandings (communication)²⁴.





The study protocol was approved at the Institutional Review Board and the participants signed free and informed consent forms before the interviews.

RESULTS AND DISCUSSION

The study included 20 nursing professionals, 12 nurses, and eight nursing technicians interviewed at the workplace.

The professionals initially resisted discussing the subject of "error" and wanted to refuse the interview. Hence, it was first necessary to sensitize the participants and briefly present the Second Victim and organizational support topics.

Clarification of examples of patient safety incidents was provided, and the participants were allowed to read the interview script. Thus, a second meeting was needed for them to have time to reflect, absorb the topic, and recall facts. After raising awareness, the professionals started declaring themselves as a second victim.

Thus, the interview was held later, depending on the availability of the interviewees, in support rooms at the units' premises, where only the participant and the researcher were present.

Seventeen of the 20 participants were women, and three were men, aged between 27 to 55, with an experience in the nursing field between two and 25 years. Ten worked the morning shift, four in the afternoon, three in the daytime, one at night, and one worked a mixed shift (morning, afternoon, and night).

Two categories enabled understanding of the impact on nursing workers as the second victim: the second victim's feelings and the impact on one's professional trajectory and the work environment (Figure 1).

Categories	Meaning units
The second victim's feelings	Guilt, fear, and shame
	Unpleasant feeling
	Stress
	Weigh on conscience
	Liability
Impacts on one's professional	Self-doubts (whether one is a good professional)
path and the work environment	Lack of self-confidence
	Lack of trust in the team
	Self-judgment
	Fear of being judged by others
	Hypervigilance
	Learning and motivation to improve

FIGURE 1: Meaning units distributed into the categories concerning the impacts on nursing workers as the second victim. Rio Grande, RS, Brazil, 2022.

The second victim's feelings

In this category, the nursing workers involved in a patient safety incident reported their feelings, including negative feelings; guilt was the most frequently reported, followed by an understanding that mistakes happen and humans are fallible. Fear and concern about what could happen to the patient and the possibility that the incident could happen again were reported, which caused them to feel insecure. The participants reported they were in doubt and initially wanted not to report the error. However, they did so because they understood that not reporting the incident could cause even more harm to the patient.

I felt guilty, yes, but then I was mature enough to know that it was something that could have happened [...] (P20)

[...] I got scared, concerned that something could happen [to the patient]. (P2)

[...] fear yes, and then you get insecure immediately after the event, then you [...]

become really afraid of making another mistake. (P13)

[...] I made a mistake; I'm going to be fired. What is going to happen? Will I lose my Coren? This uncertainty ends up harming the patient [...] (P3)

A study including 32 hospitals in the Netherlands aimed to describe the prevalence and duration of symptoms reported by health professionals involved in patient safety incidents showed 11 symptoms; hypervigilance (53%) was





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the symptom that most bothered the interviewees one month after the incident. The prevalence of symptoms lasting more than six months were flashbacks (8.7%), shame (8.2%), self-doubts about knowledge and ability (8.1%), stress (6.8%), and fear (6.3%), among others³.

Negative emotional symptoms such as guilt and fear may negatively influence health professionals' well-being and ability to work²⁵, considering that an organizational culture management based on guilt and fear reinforces these feelings²⁶.

A fair culture occurs when managers and workers are not afraid of reporting errors, as this enables the change of processes, understanding that an error does not occur only due to an individual's failure but because of the complex system in which it is inserted. Thus, a punitive approach does not prevent new incidents; rather it favors the omission of errors^{26,27}.

Therefore, a culture of safety must be promoted by disseminating the concept of patient safety and discussing a non-punitive culture toward health incidents to favor assertive practices and provide a more constructive environment to deal with issues related to this theme²⁶.

The conflicting feelings individuals involved in an incident experience have a negative impact, including stress, unpleasant feelings, and a guilty, as they understand that health care should not harm patients. They also feel helpless for being dependent on the team to find a solution and provide safe assistance.

Yes, very stressed and concerned [...] (P2).

[...] Weigh consciousness [...], the patient was under my responsibility (P4)

It is really unpleasant; we always expect to provide the best care possible. (P6)

[...] it often does not depend on you; it depends on others. It's not a feeling of incompetence but of helplessness. (P6)

Inadequate working conditions are believed to partially account for recurrent incidents. Hence, we must demystify the notion that health workers are the ones solely responsible for errors; the institution also has responsibilities²⁶. However, this is not always the conclusion reached when errors are judged by the class council²⁸, which may lead workers to experience a feeling of helplessness.

Negative feelings were also present even when one was not directly involved in the incident but was a team member, considering one's responsibility and commitment to the group.

[...] I felt guilty together [...] we trust the team, but not everyone knows everything, and things may happen. (P9) [...] I didn't see myself as the one responsible; like I'm the team's nurse [...] so I thought I'd be ok when something like this happened, you know? But, in reality, I felt awful; I got distressed for a few days. (P14)

Teamwork is vital for establishing a positive safety culture, which must be based on respect, and support provided to each other to improve the quality of care²⁶.

Impact on workers' professional trajectory and work environment

When asked about their professional abilities, the participants mentioned insecurity, manifested by a concern for the patient's life and doubts about whether they had made the right professional choice.

[...] You end up being exposed to this type of situation and sometimes wonder whether this profession is right for you, whether you have the capability to do it. (P1)

[...] You start thinking: don't I know my craft anymore? Am I in the wrong profession? I deal with lives... what if anything terrible had happened? All these come to mind (P2)

[...] I almost quit my job because I got really distressed with what I had done [...](P16)

Self-doubt about one's professional skills and technical knowledge to provide care may affect patient safety, as professionals become more likely to be involved in a new incident³. Note that studying the second victim phenomenon is not intended to exempt professionals from their responsibility but rather to prevent the recurrence of errors and to enable qualified workers to remain in the market²⁹.

Thus, this study shows that involvement in an incident made the professionals doubt themselves and the team, so they became more vigilant in the care process.

[...] because she wasn't young, and she did it, imagine me being young [...] (P12)

[...] started paying more attention to what others were doing, [...] depending on the situation, you become almost like a policeman after your employee sometimes. (P17)





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Once a punitive culture is installed in work processes, the blame for an error is on the health workers, and to change such a paradigm, responsibility must be shared ²⁷.

The errors of nursing professionals who underwent disciplinary ethical actions imposed by the class council were favored by structural failures due to working conditions, demystifying the notion that these errors are individual²⁸.

After being involved in an incident, the professionals reported needing time to reflect, which helped alleviate internal questions and their loss of self-assurance which can help to avoid new situations of similar incidents.

[...] our perceptions and attitudes are compromised after such an event. You no longer think clearly. That's why I wasn't able to talk to the patient on the same day [...] (P14)

[...] I got petrified, I felt like quitting, but then, everything cleared out, the patient got well, and I managed to resume my activities normally. (P16)

The impact on the second victim leads to social and work difficulties, as it negatively influences cognition, such as difficulty concentrating at work and introspective thoughts²⁵. As the nursing workers' reports show, self-judgment and judgment from peers and patients caused distress.

[...] I guess that my colleagues, they sort of doubted my ability to work. It's not something explicitly said, but I guess it causes an uncomfortable work environment [...](P1)

[...] I always say that nursing is a showcase, we get much more exposed [...] even the family members, [...] there is certain distrust on our work, our work is discredited [...] (P13)

You end up doubting yourself, especially when people say such things, like 'it's absurd, and this and that, don't know how to read'. So, you feel terrible and end up feeling a bad professional, incapable of doing your job [...] (P14)

[...] the degree of guilt that people impose on you Is much bigger than what it really is. So, you feel awful [...] (P20)

The difficulty in reporting errors persists due to fear of others' reactions, judgment ^{21,25}, and the possibility of not feeling comfortable with self-judgment and the organizational climate, generating tensions among peers where there should be mutual support²⁵, such as discussing incidents in a clear, non-punitive, and non-judgmental way³⁰.

As a response to moving forward and not giving up on their careers, the participants found a way to overcome the impact of involvement with an incident, paying greater attention and being vigilant when they or their colleagues are providing care. Nevertheless, it is essential to emphasize that being vigilant by itself does not ensure safety; work processes must be analyzed and reviewed after an incident. Furthermore, excessive surveillance in isolation, without modifying processes in practice, may lead workers to experience overload and stress, even increasing the possibility of incidents³.

Even though errors are individual acts, they cannot be separated from the context in which they occur. Hence, the health institution is also responsible for the occurrence of errors and must implement measures to improve work processes. Workers often need to assume multiple functions and tasks due to personnel shortages, which may intensify daily work, predisposing workers to tiredness, distractions, and lapses and contributing to incidents²⁸.

How an organization deals with incidents positively or negatively impacts the consequences of the second victim phenomenon. The reason is that the institution's support can benefit workers, increasing their self-assurance and decreasing turnover and absenteeism rates²⁵.

[...] I adopted a different stance from that day forward [...] I started policing my way of working (P7) I guess that it made me pay greater attention and alert the team in such situations [...] (P15)

Hypervigilance is a persistent symptom of the second victim phenomenon, in which the professional becomes more attentive to future situations³. In this sense, identifying risk situations is extremely important to establish a safety culture, as it focuses on error prevention²⁵. However, behavioral changes are required in addition to providing training and technical information³¹.

Another response to the incident was moving forward, improving the quality of care so that such incidents were taken as a learning opportunity and motivation for improvements.

[...] he became motivated to do a better job (P2)





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[...] it contributed to improvements, to pay greater attention to my work. Errors do not always reflect negatively [...] they appear as an opportunity [...] now it is important to pay greater attention to the potential situations that may happen (P4)

Learning must be continuous and progressive to improve the management and treatment of such incidents^{26,27}. However, developing a learning culture is only possible when grounded on a mature safety culture, in which learning is proactive, improving and identifying unsafe processes to prevent errors²⁶. Second victim support programs help workers to realize what happened and feel supported to continue providing quality care and emotional support to workers, showing the importance of services focused on occupational health²¹.

Second victim support is fundamental and ranges from the participation of individuals in groups analyzing why the events occurred and looking at the processes systematically, encouraging these individuals to share their experiences as a second victim²².

Study's limitations

This study's limitations include the low adherence of participants, as patient safety culture is not yet consolidated in the institution addressed here; hence, the professionals were still unsure whether they should talk about this topic.

CONCLUSION

The impacts for a nursing professional involved in a patient safety incident can be summarized as feeling guilty for the fact itself, fear of the outcome for the patient involved, and the consequences for himself/herself. These feelings are experienced even when one is not directly involved in the incident but is the team leader.

This study revealed the impact of such incidents on one's professional trajectory. When nursing professionals are involved in a patient safety incident, they start doubting their ability to be a good professional and their performance at work and feel their peers' judgment, as well as that of patients and their families, not to mention self-judgment.

In response to these impacts, nursing professionals decided to move forward by implementing strategies to pay greater attention for the fear of incidents reoccurring. This more intensive surveillance goes beyond their actions, including other team members' actions.

Additionally, the nursing professionals used the incidents to motivate changes and improvements in providing care and coping with the patient safety event. Hence, they learned from their mistakes and established strategies to deal with such incidents in the future. Note that second victim support strategies are implemented in healthcare environments in different countries worldwide. However, health organizations in Brazil need to identify the impacts of these incidents on professionals to structure supporting strategies that meet the needs of the Brazilian context.

REFERENCES

- 1. World Health Organization. Global patient safety action plan 2021–2030: towards eliminating avoidable harm in health care. Genebra: WHO, 2021.
- 2. Grabois V, Rosa MB. Learning with the wisdom of the frontline care. Rev Gaúcha Enferm. 2019 [cited 2022 Sep 08]; 40(esp):e20180487. DOI: https://doi.org/10.1590/1983-1447.2019.20180487.
- 3. Vanhaecht K et al. Duration of second victim symptoms in the aftermath of a patient safety incident and association with the level of patient harm: a cross-sectional study in the Netherlands. BMJ Open. 2019 [cited 2022 Sep 08]; 9(7):e029923. DOI: http://dx.doi.org/10.1136/bmjopen-2019-029923.
- Wu AW. Medical error: the second victim. BMJ. 2000 [cited 2022 Sep 05]; 320:726-7. DOI: https://doi.org/10.1136%2Fbmj.320.7237.726.
- 5. Ozeke O, Ozeke V, Coskun O, Budakoglu II. Second victims in health care: current perspectives. Adv Med Educ Pract. 2019. [cited 2022 Sep 05]; 10:593–603. DOI: https://doi.org/10.2147/AMEP.S185912.
- Scott SD, Hirschinger LE, McCoig M, Brandt J, Hall LW. The natural history of recovery for the healthcare provider "second victim" after adverse patient events. Qual Saf HealthCare. 2009 [cited 2022 Sep 08]; 18(5):325-30. DOI: https://doi.org/10.1136/qshc.2009.032870.
- Kim EM, Kim S, Lee J, Burlison D, Oh EG. Psychometric Properties of Korean Version of the Second Victim Experience and Support Tool (K-SVEST). J Patient Saf. 2020 [cited 2022 Sep 15]; 16(3):179-86. DOI: https://doi.org/10.1097/pts.000000000000466.
- 8. Chen J, Yang Q, Zhao Q, Zheng S, Xiao M. Psychometric validation of the Chinese version of the Second Victim Experience and Support Tool (C-SVEST). J Nurs Manag. 2019 [cited 2022 Sep 15];27(7):1416-22. DOI: https://doi.org/10.1111/jonm.12824.



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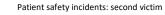
Research Article Artigo de Pesquisa Artículo de Investigación

- 9. Santana-Domínguez I, González-de la Torre H, Martín-Martínez A. Cross-cultural adaptation to the Spanish context and evaluation of the content validity of the Second Victim Experience and Support Tool (SVEST-E) questionnaire. Enferm Clin (Engl Ed). 2021 [cited 2022 Sep 17]; 31(6):334-43 DOI: https://doi.org/10.1016/j.enfcli.2020.12.042.
- 10. Scarpis E, Castriotta L, Ruscio E, Bianchet B, Doimo A, Moretti V, et al. The Second Victim Experience and Support Tool: A Cross-Cultural Adaptation and Psychometric Evaluation in Italy (IT-SVEST). J Patient Saf. 2022 [cited 2022 Sep 17]; 18(2):88-93 DOI: https://doi.org/10.1097/pts.000000000000012.
- 11. Sordi LP, Lourenção DCA, Gallasch CH, Baptista PCP. The second victim experience: cross-cultural adaptation of an instrument for the Brazilian context. Rev. Gaúcha de Enferm. 2022 [cited 2022 Sep 19]; 43:e20210010 DOI: https://doi.org/10.1590/1983-1447.2022.20210010.en.
- 12. Koca A, Elhan AH, Genç S, Oğuz AB, Eneyli MG, Polat O. Validation of the Turkish version of the second victim experience and Support Tool (T-SVEST). Heliyon. 2022 [cited 2022 Sep 19]; 8(9):e10553 DOI: https://doi.org/10.1016/j.heliyon.2022.e10553.
- 13. Kamaruzaman AZM, Ibrahim MI, Mokhtar AM, Zain MM, Satiman SN, Yaacob NM. Translation and validation of the Malay Revised Second Victim Experience and Support Tool (M-SVEST-R) among healthcare workers in Kelantan, Malaysia. Int. J. Environ. Res. Public Health. 2022 [cited 2022 Sep 19]; 19(4):2045; DOI: https://doi.org/10.3390/ijerph19042045.
- 14. Knudsen T, Abrahamsen C, Jørgensen JS, Schrøder K. Validation of the Danish version of the Second Victim Experience and Support Tool. Scandinavian Journal of Public Health. 2022 [cited 2022 Sep 19]; 50(4):497-506. DOI: https://doi.org/10.1177/14034948211004801.
- 15. Ajoudani F, Habibzadeh H, Baghaei R. Second Victim Experience and Support Tool: Persian translation and psychometric characteristics evaluation. Int Nurs Rev. 2021 [cited 2022 Sep 20] 68(1):34-40. DOI: https://doi.org/10.1111/inr.12628.
- 16. Strametz R, Siebold B, Heistermann P, Haller S, Bushuven S. Validation of the German Version of the Second Victim Experience and Support Tool—Revised. J Patient Saf. 2022 [cited 2022 Sep 20]; 18(3):182-92. DOI: https://doi.org/10.1097/pts.000000000000886.
- 17. Paula AG et al. Second victim support programs and their impacts: integrative review. Nursing. 2022 [cited 2022 Aug 24]; 25(284):6961-8. Available from: https://www.revistanursing.com.br/index.php/revistanursing/article/download/2145/2649/7104.
- 18. Edrees HH, Wu AW. Does one size fit all? Assessing the need for organizational second victim support programs. J Patient Saf. 2021 [cited 2022 Aug 30]; 17(5):247-54 DOI: https://doi.org/10.1097/pts.00000000000321.
- 19. Choi EY, Pyo J, Ock M, Lee H. Profiles of second victim symptoms and desired support strategies among Korean nurses: a latent profile analysis. J Adv Nurs. 2022 [cited 2022 Aug 20]; 78(9):2872-83. DOI: https://doi.org/10.1111/jan.15221.
- 20. Huang R, Sun H, Chen G, Wang J. Second-victim experience and support among nurse in mainland China. Journal of Nursing Management. 2022 [cited 2022 Aug 25]; 30(1):260-7. DOI: https://doi.org/10.1111/jonm.13490.
- 21. Pimenta IR. Apoio aos profissionais de saúde: a exposição a incidentes de segurança do doente e a existência de estruturas de suporte. Dissertação (Mestrado em Gestão e Avaliação de Tecnologias em Saúde). 2021. Lisboa (PT): Escola Superior de Saúde da Universidade do Algarve, Portugal.
- 22. Quadros DV, Magalhães AMM, Wachs P, Severo IM, Tavares JP, Pai, DD. Modeling of adult patient falls and the repercussions to Nursing as a second victim. Rev. Latino-Am. Enfermagem. 2022 [cited 2022 Aug 12]; 30:e3618. DOI: https://doi.org/10.1590/1518-8345.5830.3618.
- 23. Souza VR, Marziale MH, Silva GT, Nascimento PL. Translation and validation into Brazilian Portuguese and assessment of the COREQ checklist. Acta Paul Enferm. 2021 [cited 2022 sept 25] 34:eAPE02631. DOI: https://doi.org/10.37689/acta-ape/2021AO02631.
- 24. Moraes R, Galiazzi MC. Análise textual discursiva. Ijuí: Ed. Unijuí, 2016. 264 p. (Coleção educação em ciências). E-book ISBN 978-65-86074-19-2 (digital).
- 25. Busch IM, Moretti F, Purgato M, Barbui C, Wu AW, Rimondini M. Psychological and psychosomatic symptoms of second victims of adverse events: a systematic review and meta-analysis. J Patient Saf. 2020 [cited 2022 Aug 08]; 16(2):e61-e74. DOI: https://doi.org/10.1097/pts.000000000000589.
- Lemos GC, Azevedo C, Vaz MF, Bernardes MFVG, Ribeiro HCTC, Menezes AC, et al. The patient safety culture in the scope of nursing: theoretical reflection. Rev. enferm. Cent.-Oeste Min. 2018. [cited 2022 Aug 05]; 8:e2600. DOI: https://doi.org/10.19175/recom.v8i0.2600.
- 27. Romero MP, González RB, Calvo MSR, Fachado AA. Patient safety, quality of care and ethics of health organizations. Rev. Bioét. 2018 [cited 2022 Aug 03]; 26(3):333-42. DOI: https://doi.org/10.1590/1983-80422018263252.
- 28. Silva-Santos H, Araújo-dos-Santos T, Alves AS, Silva MN, Costa HOG, Melo CMM. Error-producing conditions in nursing staff work. Rev Bras Enferm. 2018 [cited 2022 Aug 05]; 71(4):1858-64. DOI: http://dx.doi.org/10.1590/0034-7167-2017-0192.
- 29. Quadrado ERS, Tronchin DMR, Maia FOM. Strategies to support health professionals in the condition of second victim: scoping review. Rev Esc Enferm USP. 2021 [cited 2022 Aug 01]; 55:e03669. DOI: https://doi.org/10.1590/S1980-220X2019011803669.
- 30. Tartaglia A, Matos MAA. Second victim: after all, what is this? Einstein (São Paulo). 2020 [cited 2022 Sep 06]; 18: 18:eED5619. DOI: https://doi.org/10.31744/einstein_journal/2020ED5619.
- 31. Wu AW, Busch IM. Patient safety: a new basic science for professional education. GMS J Med Educ. 2019 [cited 2022 Aug 10]; 36(2):Doc21. DOI: https://doi.org/10.3205%2Fzma001229.

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