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BMJ Open Key elements for designing effective second victim support interventions: a focus group study in European clinical settings

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ABSTRACT

Background The second victim (SV) experience limits the performance of health and care workers and places patients at risk. Peer support is recognised as the most effective, feasible and acceptable intervention to mitigate its impact.

Objective To define a set of success factors when designing interventions to support SVs in health and care facilities based on expertise in different European

Setting International collaboration involving countries with diverse cultures, structures and legal frameworks. **Design** Qualitative research.

Method Focus groups involving a total of 43 participants were conducted in five countries. Prominent professionals in European peer support interventions were engaged. Analysis of common elements considered key to the success of these programmes was underscored. **Results** Critical success factors for designing effective SV support interventions included the need for an occupational health approach, the establishment of a strong organisational safety culture, immediate psychological first aid, long-term resilience building, the engagement and training of peer supporters, the provision of adequate resources and ongoing support, the importance of leadership commitment and the necessity of tailoring interventions to the specific context and needs of each institution and country considering their diverse sociocultural and legal framework. The expected benefits included ensuring optimal patient care and reducing associated costs such as staff turnover and litigation. **Conclusion** Effective SV support interventions are essential for enhancing the resilience and performance of health and care workers, ultimately improving patient safety. By implementing tailored and well-resourced interventions. healthcare institutions can mitigate the negative impact of the

INTRODUCTION

SV phenomenon, promoting optimal care.

The size of the global workforce of healthcare workers (HCWs) is enormous. In Europe,

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This compendium of recommendations is based on experiences that are well-established, acceptable and effective.
- ⇒ The recommendations are up to date with the latest conceptual developments and evidence on what works at this level.
- ⇒ The culture and context regarding the conceptualisation of human fallibility and the legal framework of each country or region should be considered when evaluating these recommendations.
- ⇒ This study has not analysed coping strategies that professionals individually employ to handle highly stressful situations.
- ⇒ There may be factors associated with effective leadership in the successful experiences considered, which might not necessarily be present in the same manner in other contexts.

this sector accounts for over 10% of all jobs, and this proportion is growing. Public and private providers have an ethical and legal responsibility to ensure that their workers operate under appropriate conditions, which also ensures a direct benefit for the recipients of these services.²

One of the factors that can cause an important emotional and psychological impact on HCWs limiting their performance is the so-called second Victim (SV) experience.

Since Wu first contextualised this experience in 2000,³ the body of literature characterising the phenomenon and describing support interventions has grown. SV has been recently defined as a HCW directly or indirectly involved in an unanticipated adverse patient event, unintentional healthcare error,



or patient injury and who becomes a victim in the sense that they are also negatively impacted.⁴

The SVs' experience produces psychological and physical discomfort which reduces the well-being at work (in more severe cases, triggering mental health disorders such as substance abuse, psychosomatic and anxiety disorders, depression, post-traumatic stress disorder or conducting to suicide), disaffection and defensive practices that worsen performance and put recipients at higher risk.⁵ The preventable accumulation of stressors and the absence of protective factors at the organisational, individual and team levels lead to poor performance among HCWs (eg, resulting in mistakes that cause harm to recipients) and trigger SV's experiences.⁶

SVs experiences occur in all settings (hospitals, primary care, residential care institutions) and affect all health and care professions (physicians, nurses, midwives, therapists, occupational therapy aides, trainee health professionals and others). Likewise, informal carers' experience as SVs undermines their self-esteem and ability to provide appropriate care for their charges. Factors like gender, social uprooting and limited resources can also exacerbate the impact of the SV experience.⁸ Available data suggest that 40% to 90% of HCWs have had at least one experience as SVs, 9 10 while over 60% of healthcare students and residents present typical SV symptoms. 11-13 Some results suggest that 64% to 85% of trainees experience emotional disturbance following safety incidents, ¹⁴ and some are humiliated or verbally abused for errors they commit.¹⁵ These emotional responses are more intense among women compared with men. 16 These events could influence their careers. Thus, despite the SV frequency underestimation¹⁷ and the cultural taboos surrounding it, this experience is highly prevalent in clinical settings.

Some initiatives have been developed raising awareness of the problem among HCWs and setting up institutional support resources for SVs. ¹⁸ Most reactive interventions are based on peer support and seek to restore the SV to previous levels of performance and well-being. ¹⁹ To tackle the SV experience, preventive and restorative interventions should be combined at the individual, team and organisational levels and must address occupational, psychological, cultural, and social factors. ²⁰

The ForYOU team at the University of Missouri²¹ and the Resilience in Stressful Events (RISE) programme at Johns Hopkins Hospital²² are two reference intervention programmes (IPs) in response to the SV needs. RISE network already involves more than 100 hospitals in the USA. In Europe, the most cited IPs are Buddy,²³ KoHi¹⁰ and the pioneering IP led by the KU Leuven Institute for Healthcare Policy.²⁴ From a preventive approach, MISE²⁵ (developed in Spain) is the most cited. Support programmes, by reducing absenteeism, turnover and lost workdays, can result in savings of between \$8080 per nursing professional in a general hospital²⁶ and up to \$22000 per professional identified as a SV per year.²⁷

Recently, in review studies of empirical research, elements have been identified that support interventions

for SVs, primarily based on peer support.^{28–31} These studies have described and compared support strategies, elements for disseminating these support programmes and training for peer supporters. Leading approaches and experiences from support programmes in the USA have been well-documented in the literature, highlighting critical success factors. However, the success factors and challenges faced in European experiences have not yet been analysed or shared.

These IPs require a shift in organisational culture replacing a culture of blame with a just culture which refers to leadership styles, allocation of resources and an environment of respect and trust. The just culture consists of shared responsibility when things go wrong between the organisation and its employees which has an impact on SVs, mitigating or exacerbating symptoms. In Europe, the legal and organisational context of healthcare institutions does not always align with that of the USA, so an analysis of European experiences can provide additional useful information for designing support programmes in diverse legal and healthcare settings.

This research aims to define a set of success factors when designing IPs to support SVs in healthcare facilities. These criteria would be also considered a pathway when managers are making decisions about the future implementation of support interventions.

METHODS

Study design and qualitative approach

A study was carried out based on the qualitative methodology of grounded theory, in which the focus group technique was used for data collection.

Grounded theory is a qualitative methodology developed by Glaser and Strauss³³ that is characterised by going from data to theory (inductive approach). In this way, novel theories can be developed by integrating experiences and data obtained through exploring reality in an open-minded, comprehensive and rigorous manner.³⁴ By using this qualitative methodology in this study, we aimed to develop a model that integrates the key elements of designing an IP to support SVs by understanding and bringing together the experiences and perspectives that exist so far in Europe from a multicultural and multiprofessional perspective.

The choice of this methodological approach was based on two circumstances. First, several review studies have been conducted so far that synthesised the characteristics of different SV support IPs and others based on single cases that described the outcomes of these interventions from a quantitative approach. However, the available evidence on the actual impact of these IPs on patient outcomes and patient safety was and remains limited. Second, in Europe, the ERNST Consortium (The European Researchers' Network Working on Second Victims), composed of researchers from 43 European countries, has been working for 3 years to translate international experience, mainly from the USA, Canada and the UK, to the



European context. Lacking robust quantitative evidence, this network provided an opportunity in Europe to build an intervention model to support SVs based on data from the integration of the experiences of those on the European ground dealing with this issue. The research team of this study considered the ERNST Consortium to be an optimal vehicle to complement the available literature with specific recommendations emerging from the different current realities of SV support provision in Europe.

This study was carried out in five European countries following an identical protocol involving researchers from 10 European countries. Protocol was approved for all team research countries ensuring its adaptation to national reality. The definition of SV used in this study followed the ERNST conceptualisation.⁴

A total of five Focus Groups were conducted in Spain, Denmark, Finland, Croatia and Portugal during the period from 20 September 2022 to 11 October 2023, involving leaders and peer supporters of IPs and experts in healthcare quality and patient safety. The same script of questions was used in all participating countries (see online supplemental material 1).

This manuscript was developed in accordance with the Standards for Reporting Qualitative Research³⁵ (see online supplemental material 2).

Researchers' characteristics and reflexivity

The research team comprised 15 professionals (10 women and five men) linked to the ERNST Consortium, with expertise in patient safety, quality assurance, public health and occupational health, and, specifically, in research on the SV phenomenon. Regarding profile and qualifications, six were doctors, four nurses, two psychologists, one biologist, one biotechnologist and one physiotherapist. Of these 15 European professionals, eight participated in conducting the focus groups, five as moderators and three as support staff. The facilitators had extensive experience applying qualitative research techniques and shared a 2-year track record of working together on these techniques in the framework of the ERNST activity. In all five focus groups, some participants were known professionally to the moderators, but this was not the case for the total composition of the groups. To avoid possible biases introduced by the researchers, the moderators facilitated the session with a structured script comprised of key and cluster questions agreed on by the research group, which they had the opportunity to discuss together before conducting the sessions. The support staff recorded and transcribed ideas while serving as a secondary control. In each country, a neutral meeting place was chosen, unrelated to the participants, but in a central location to facilitate travel and attendance.

Ethical considerations

The study protocol was reviewed by the Research Ethics Committee of the Hospital de Sant Joan (Spain), which determined that the objectives, theme and method did not require formal processing and approval. No personal data was recorded, and all participants were informed that they could withdraw from the study at any time. Participation was voluntary, and no compensation was provided. Informed written consent was obtained from participants after a comprehensive explanation of the study's aims, procedures, implications, and risk-benefit analysis.

Throughout the preparation of this manuscript, the authors employed large language models, such as GPT-40, to improve the translation into English. Subsequently, the authors meticulously reviewed and edited the material as necessary, taking full responsibility for the content of the publication.

Discussion guide development

A script was designed by the research team considering the literature, particularly recent review studies published and local issues. It included semistructured questions. The contents were divided into four main groups: purpose, target audience, activation scenarios and procedural considerations. During the sessions, participants were asked about the objectives of support SVs, the situations in which the support resource is activated, the professional profiles targeted by the support resource, procedural considerations for supporting SVs and the outcomes to be measured. However, this guide allowed flexibility for participants to explore topics in-depth or introduce new topics during the discussions.

Planning and recruitment

In order to select the countries, it was sought that they had programmes in place for the SVs and that they were located in countries with diverse legal frameworks, and healthcare systems.³⁶

We aimed for between 7 and 10 participants per group to balance diversity and manageability. The recruitment of experts included professionals who serve as peer supporters, those responsible for quality and patient safety areas, or developers and leaders of IPs. To ensure the viewpoint of diverse profiles on the topic of discussion, the groups involved professionals with different levels of experience in the field, from residents to senior professionals with more than 25 years of experience in patient safety.

Data collection

The sessions were conducted by an in-country member of the ERNST Consortium (funded by COST) and lasted approximately 2 hours. In Finland, the total duration of the meetings was 6 hours, which had to be split into different days. In Denmark, the session was reported through careful notetaking by two participants, including central verbatim quotes. In other countries, sessions were recorded, with the informed consent of the participants, and were destroyed after transcription.

Data analysis

Thematic analysis was applied.³⁷ All transcriptions were verbatim to capture the expertise of the participants,



which were then summarised, and central quotes were selected for each category. Participants received a report of their contributions (including anonymised notes and quotes), provided feedback and approved it. Each national team was responsible for ensuring the accurate translation of the contributions into English. This approach ensures that the nuances and context of their responses were preserved during the analysis.

The process involved reading the verbatim transcripts thoroughly to gain a comprehensive understanding of the content, combined with reviewing notes taken during the sessions. A coding framework was developed based on the research questions and initial readings. Codes, which were labels representing criteria discussed by participants, were categorised into broader themes. The next phase involved condensing the information. Each theme was summarised by condensing the verbatim data into concise statements that captured the essence of participants' responses. This included selecting representative quotes and paraphrasing where necessary. The research team integrated these summaries, incorporating relevant aspects from all the countries involved. The summarised themes were then integrated into a coherent narrative addressing the research questions. Different topics discussed were classified into categories by the responsible parties from each country. These categories were defined prior to the sessions by the heads of the respective countries and were prepared in a template to facilitate sharing results and allow triangulation of the information. However, they were reviewed in the light of contributions. Finally, the coded and analysed information was used to develop a checklist to enhance understanding of the key points and facilitate their implementation. ERNST members with expertise in these IPs from Belgium, Estonia, Germany, Israel and Italy were also involved in this task, ensuring appropriate classification and interpretation. External data analysis was conducted to mitigate potential biases arising from the overrepresentation of any country. To ensure the validity of the findings, the research team checked for consistency across different focus groups and sought feedback from participants.

Patient and public involvement

Patients and the public were not involved in this study.

RESULTS

A total of 43 experts from the five countries attended the focus groups, being 31 women and 12 men. According to their origin, nine were from Spain, seven from Denmark, nine from Finland, eight from Croatia and 10 from Portugal. The profiles of the invited experts were members of government, healthcare quality managers, public health specialists, occupational health specialists and mental health specialists. Sociodemographic and professional characteristics of the experts involved in the focus groups are presented in online supplemental material 3.

Online supplemental material 4 delineates the primary topics addressed along with the respective countries contributing to them.

What the aim is

The SV experience is considered an occupational risk derived from the nature of care activity. Consequently, the support intervention should be based on an occupational health approach, without prejudice to the possibility of intervention by mental health units if the signs of the SV suggest the need for specialised support.

It is also recommended that it is implemented in the occupational health department so they can reach to the department after the adverse event. (Croatia)

Following a traumatic incident, it is essential to provide immediate psychological first aid and promote long-term resilience. Intervention should reduce further mistakes, defensive practices and associated costs, such as staff turnover, sick leave and litigation. It is crucial for the intervention to target on prevention of psychosocial and physical distress in SV (education and supervision, acknowledging adverse events as a fundamental condition when working in healthcare) and handling the aftermath of stressful events. Therefore, the framework must take on a dual preventive and interventionist approach.

The intervention should have a triple aim: improve patient safety, improve psychosocial work environment and reduce costs. (Denmark)

It is also important to assess (in the most serious events) the psychological impact on professionals and whether this prevents them from intervening in the future in the same way. (Portugal)

Table 1 summarises the critical success factors for supporting SV interventions.

Integration into the institutional policy

A positive organisational culture (eg, just culture) is essential for effective intervention, requiring management commitment and internal communication to promote a safe environment for discussing errors and vulnerabilities. Top management must be aware of the SV phenomenon's impact on staff and patient safety and support both professionals and patients. Support for SVs should be integrated into organisational policies. A comprehensive intervention must include support for patients and ensure transparent communication about adverse events, respecting patients' rights. Local adaptation of objectives and resources is necessary for effective implementation, with external support, training and monitoring. Intervention should be linked to all relevant bodies within the organisation, including clinical commissions, Patient Safety or Occupational Health units, and legal departments. Recognising the SV experience as an occupational risk necessitates an occupational health approach, with potential mental health unit involvement for specialised



Table 1 Critical succe	ess factors to be considered when designing second victim support interventions Description
Aim of the programme	· ·
Integration into institutional policy	 Positive organisational culture (eg, just culture) and management commitment. Promote a generative patient safety culture. Transparent communication about adverse events, respecting patients' rights.
Feasibility of the programme	 Local adaptation of objectives and resources according to the care level and setting. The physical structure should include offices, meeting rooms and active communication channels known by the staff, along with unique identifiers such as an acronym and logo. Without needing to hire additional staff, this approach could involve creating a network of peer supporters across multiple centres to accommodate the second victim's preferences regarding the support professional's profile.
Involvement of top management	 Commitment and support from management. Internal communication to inform staff about the support intervention. Promote a psychologically safe environment to discuss errors and vulnerabilities.
Bodies and commissions involved	 Implementation through clinical commissions, working groups, or Patient Safety and Occupational Health departments. Legal advice to protect the rights of involved patients and professionals
Awareness and dissemination	 Preparedness, awareness and education about the second victim phenomenon. Publicise the method to ensure confidentiality. Informative documentation, training sessions and coaching.
Situations activating support	 Serious adverse events and sentinel events. Incidents without harm or poor patient outcomes, sluggish patient progress.
Profile of targeted professionals	 Any individual or team meeting the locally defined inclusion criteria. Special attention to young healthcare professionals, students and residents.
Support provision	 Support based on a peer support model. Individual and group interventions as needed. Guideline for training and implementing peer supporters' approach. Specific or general supervision during procedures and clinical decision-making Determine a procedure to relieve the second victim of their care duties on the day of the stressful event. Identify measures to support the second victim's return to their previous activities after a sick leave
Support providers	 Peer support model with the possible inclusion of mental health staff to address specific emotional conditions. Profile: experience in patient safety, empathy, ability to diagnose and refer appropriately. Peers who have experienced being a second victim are promoted as support providers. Some second victims prefer that the peer supporter does not work in the same department or centre, so this possibility should be considered.
Resource operation	 Flexible and needs-adjusted access. Agile response available 24 hours/7 days a week. Confidentiality guaranteed in support provision.
Caring for patients and relatives	 Coordination of the adverse event communication to patients or families. Psychological and emotional support for patients and families as part of the protocol.
Outcomes to consider	

support. The IP should be part of the centre's services, clearly defining responsibilities and resources.

What we see is that there are a lot of facilities that have incident reporting systems as a goal, but they don't have a safety culture. (Spain)

Fostering a culture of safety and open communication with patients is key to worker safety. (Finland)

Legal frameworks may influence support IP development and implementation, requiring adjustments for compliance.



Feasibility

Most initiatives to address the SV experience are based on the provision of peer support and, in the most severe cases, from the specialised resources of the centre (mental health, occupational health, etc), which amortises the investment that the institution must do for its implementation as it does not require the hiring of additional personnel.

It should be based on a peer support model as this is the most desired source of support for most professionals and is a more economically viable and sustainable option than alternatives such as hiring external support providers. (Spain)

Minimum structures are required to carry out the intervention, both physical (office, pavilion, etc) and multimedia (table, computer, telephone). Implementing an IP to support SVs requires local adaptation of its objectives to the available structures and resources, considering the particularities of each care level and setting. External support, training and ongoing monitoring might be of great importance for effectively putting this programme into practice. In relation to primary care for SVs, the resources and activities allocated should be adapted to the structure and organisation of outpatient care in each territorial area within each country.

I consider it to be more viable in larger healthcare units. For smaller units, approaches that combine several locations will make more sense. (Portugal)

An adequate visualisation of the support programme requires a minimal structure in practice, including communication channels, a response centre and offices for confidential interviews. Additionally, a larger room is needed for debriefing the group of supporters.

Involvement of top management

The successful implementation of interventions to support SVs requires the commitment of the centre's management. The management should undertake internal communication actions to inform the institution's staff of the support IP, providing information on why, how, for what, and by whom and on the conditions for personal data protection (anonymity).

Management must assume that such a program exists and support it. In addition to peer support, in some cases, second victims are grateful that someone close to management and trained to do so have a supportive conversation with them about what happened. (Spain)

Although the management does not participate in the first line of intervention, its involvement in the implementation, promotion and monitoring of the results is crucial. Managers should act as role models and facilitate a psychologically safe environment to speak-up about errors, fallibility and vulnerability from a non-blaming perspective.

A starting point is to make top and middle level management aware of the SV phenomenon and how it

negatively affects staff and, consequently, the quality and safety of care. It is also essential for top management to support patients and their families by designating specific resources for this purpose and supporting the professionals managing the incident on the front line.

Management of the hospital should first be educated about the issue of second victims in healthcare and the negative consequences of neglecting the issue with the entire system. (Croatia)

Bodies or commissions

The scope and characteristics of care for SVs should be implemented through clinical commissions, working groups, or patient safety or occupational health units, especially when these units address not only ergonomic issues but also other psychosocial factors at work that impact the health and well-being of the centre's professionals. Legal departments can also be considered to provide advice to SVs by addressing any legal concerns and ensuring that the rights and interests of the professionals involved are protected if the safety incident involves major implications. It would be desirable that the assistance intervention be included in the centre's portfolio of services, specifying the responsibilities, activities and resources assigned.

Second victim support includes all the bodies and commissions in the organisation. (Finland)

Stressful situations addressed

The organisation should define whether it has an intervention aimed at promoting the well-being of health-care professionals in general or specifically in the case of SVs. Currently, the aims are supporting HCWs' emotional well-being and helping them regain performance levels prior to a highly stress event such as a patient safety incident, patient deterioration or sluggish patient progress.

If someone asks for support, it must be given. (Spain)

If the support intervention is specifically designed for SVs, it will be activated in the case of a serious adverse event, particularly in the case of a sentinel event.

However, this does not preclude its use in cases of incidents without harm or in situations where the patient's condition evolves poorly (eg, poor health outcomes) and in the aftermath of highly stressful events (such as sluggish patient progress, provided that the professional in question meets the inclusion criteria (emotional impact that hinders the normal execution of their duties).

Stress may be experienced by healthcare professionals following a stressful situation that is not related to an adverse event. This could be linked to the natural or unexpected progression of the disease. (Croatia)



Profile of professionals targeted

Support should be provided to any individual or team working in the facility who meets the locally defined inclusion criteria. This includes subcontractors' staff whose work activity may affect the patient's experience and health outcomes during their stay in the facility, even if they do not have a healthcare profile (eg, administrative personnel, cooking staff who prepare meals for inpatients or orderlies responsible for transfers of patients who may be involved in falls or identification errors).

Supportive intervention should be available to anyone working in the healthcare environment, including students. (Spain)

Pay special attention to the young healthcare professionals (including students and residents) who may be more vulnerable and afraid to speak up because of the hierarchical structures of the organisation. Furthermore, they may have a poor social network in the organisation due to educational rotation between departments. It is highly advisable to establish agreements between universities and healthcare centres. Some other aspects to consider are the coverage of internship insurance, strict compliance with supervision activities by the direct supervisor, and the way in which the error is conceptualised and managed, since these are personnel who have not yet completed their training and, therefore, are not fully qualified for professional practice.

The support programme should be sensitive to individual variability in emotional response and address all situations associated with safety incidents that may lead to a decrease in the quality of care or an increase in risk for patients.

In all cases, receipt of support will be voluntary. Therefore, the institution will respect the decision of those who meet the inclusion criteria and refuse to receive support. However, in these cases, information on the resource's availability and operation will be provided in case they change their mind in the future.

Awareness and dissemination

There are several key elements that have to be considered when implementing a SV support IP from the ground up. First, ensuring preparedness, awareness and education on the matter is essential (stressing concepts such as confidentiality and non-blaming). Safe and empathetic action and support must be provided immediately after a traumatising event, followed by ongoing care and support for as long as necessary. Indeed, a generic 'package' of SV support interventions should be made available—and locally tailored to the needs of the organisation, which includes the necessary materials for peers (brochures and booklets, presentations, etc). Before implementation, it may be a good idea to start with pilot studies to assess acceptance and development in the institution. In departments with a low degree of psychological safety, the first step may be to uncover this level (eg, through Edmondson's survey) to consider whether the implementation

of SV support interventions should be embedded in a broader occupational environment effort targeting psychological safety.

Second, dissemination among employees is essential to make them aware of the existence and availability of the resource. It may include informative documentation (posters, brochures, etc), awareness-raising, training and coaching, and information sessions aimed at unit/service managers and their professional teams, internal circulars, messages on institutional social networks, screensavers, etc.

It's a priority to increase institutional awareness and knowledge about the topic. (Portugal)

I think it should also be a function of this structure to actively disseminate the support program as part of the safety culture. "We are a safety group, not management, not mental health. It is a methodological issue. We are not going to audit". (Spain)

Support provision

The provision of support would be structured in levels according to the nature, intensity and specificity that responds to the needs of the SV throughout the recovery process. The definition of these levels of support according to their specificity also requires the involvement of different professional profiles and agents of the organisation with variable degrees of awareness and training.

Support should begin in their own unit or service where he/she must be provided with psychological first aid by their own colleagues, immediate hierarchical superiors or natural sources of support. However, it is important to tailor this to the local context. Additionally, the guideline of the intervention must include a procedure to relieve the SV of their care duties after the occurrence of a highly stressful event. Similarly, it should include measures to support the SVs' return to their previous activities after a period of leave.

During the first hours after the incident, it is very positive for the subsequent recovery if the professionals involved can talk and receive support from a colleague in the unit or a superior with whom they have a close relationship. (Spain)

Peer support should aim at providing psychological first aid, so active listening and emotional accompaniment of the SV form the basis of the support intervention. Depending on the resources available, the intervention could contemplate the SVs' free choice of peer supporter. In practice, some SVs seek to talk to colleagues in their own service; others prefer to talk to professionals with whom they have no direct professional relationship, and still others choose to talk to people completely outside the health sector. This places emphasis on an already established safe relationship. It would also be desirable to have the possibility of requesting a change of support provider. Evaluating the functionality of the support after each session could be useful.



Support interventions are usually individual, but in some cases, they can be conducted in a group setting, such as when they involve multiple members of the same service.

Different kind of peer support should be identified, for example, organisational or professional networks. (Finland)

There is no recommended limit to the number of support sessions, as it should be based on individual needs. However, if it is extended to more than three or four sessions (4 weeks approximately), it is advisable to change supporter to avoid burnout. It should be noted that there must be an agreed time frame for the support case to care also for the peer support person. Compulsory debriefing or sessions are not recommended.

It is of utmost importance that the organisation supports SVs to regain their self-confidence. This can include specific or general supervision or support during procedures or clinical decision-making, as well as handling complaint cases or conducting an open dialogue with the patient and relatives. The contextual factors of each event must be uncovered to match the level of support to the needs. To this end, it is desirable to create trained and differentiated teams to support professionals and that are integrated or articulated with risk management structures.

Management must assume that such a program exists and support it. In addition to peer support, in some cases, second victims are grateful that someone close to management and trained to do so will have a supportive conversation with them about what happened. (Spain)

It must be noted that the peer support model does not preclude the support network from including specialised mental health staff for cases where more intensive support is needed. In cases where it may be helpful, support from a chaplain or other spiritual figure may also be considered. The protocol for referral to a professional should be agreed on in advance. The provision of support will be progressively adapted to each case as the needs of the professional concerned evolve. In addition, peer supporters must be aware of red flags (suicidal, severely decompensated person).

The processes of providing support to the SV and analysing the incidents are usually carried out simultaneously and co-ordinately, as they are articulated under the safety structures and commissions. Usually, the collection of facts for root cause analysis by interviewing the professionals involved in the event after reporting is used as an opportunity to offer support services. So, root cause analysis on the ward with the staff involved immediately after the adverse event should be considered. The SV is an essential source of information for understanding what happened. Learning about adverse events requires gaining insights into SV experience, reflection and acquiring knowledge. The internal investigation may trigger the initial SV symptomatology with greater

intensity, so the support resource should be aware of this circumstance and increase the support if necessary.

The intervention is a smaller investment than the longterm cost of neglecting the consequences of adverse events. (Denmark)

The institution must have a mechanism for reporting an adverse event. The support provided to the health professional must be a mandatory part of this mechanism. An action flowchart must be created by the institution. Feedback should be given to the professional on what was found when evaluating the adverse event. Procedures should be changed based on what is learned from evaluating the causes of different events. (Portugal)

Support providers

The core of support intervention should be based on a peer support model as this is the most desired source of support for most professionals and is a more economically viable and sustainable option than alternatives such as hiring external support providers. Nevertheless, as mentioned above, this does not detract from the fact that psychological or psychiatric support can be used if necessary.

The profile of the support professional should be that of a person with experience in patient safety and specifically qualified to offer psychological first aid and make a differential diagnosis of the psychological state of the professional and have the criteria to make the appropriate referrals at the appropriate time. These people must be empathetic and calm and be available to attend interventions. Typically, they are well-respected professionals who are socially accepted due to their excellent interpersonal skills. The voluntary nature of the action must be considered, and this should not be deemed an obligation or default. Peers who had experienced as SV are highly recommended.

In all cases, specific training is necessary to ensure their competence in this role. This usually involves role-play exercises, group discussions or storytelling sessions. Annual or semi-annual refresher training sessions are recommended. Coordination sessions for the peers, regarding content and frequency, should be scheduled to ensure the smooth running of the project. In some cases, peer supporters will need to release emotional tension, and debriefing sessions are advisable.

In the provision of support to residents or students, it is worth considering the role of mentors as a natural source of support, given their proximity to the residents. In the case of students, it would be advisable to coordinate the support function with the academic institution to which the trainee still belongs. If the support system includes self-selection of peer supporters, the hierarchical structure is not a barrier. It is important to signal to them that adverse events can impact everybody—even those at the top of the hierarchy.

We, in our centre, have started precisely with a second victim support program for residents. One positive thing about this



Box 1 Recommendations on how to conduct interviews with second victims

- ⇒ Create a pleasant emotional atmosphere.
- ⇒ Encourage the second victim to guide the conversation.
- ⇒ Emphasis on interpersonal relationship.
- ⇒ Active listening.
- \Rightarrow Ask open-ended questions.
- \Rightarrow Provide presence and only presence if interpretation is not applicable at the moment.
- ⇒ Follow the affect, not just the words.
- \Rightarrow Do not focus exclusively on the truth of claims.
- ⇒ Allow silence.
- \Rightarrow Concentrate on the experience and emotions.
- \Rightarrow Normalise second victim's feelings.
- ⇒ Avoid judging the responsibility for the adverse event or other patient safety issue.
- ⇒ Offer legal advice.
- ⇒ Make a plan; ensure that next steps are clear for the second victim.
- ⇒ Follow-up with second victim in 1–2 weeks.

situation is that the resident already has a support person (mentor), or at least they should. (Spain)

The support team should be multidisciplinary and adjusted to the needs of each case. It is recommended to have at least the following profiles in the design and implementation of the intervention: responsible for patient safety or quality of care, medicine (including psychiatry and occupational medicine among different specialities), pharmacy, nursing and psychology. Optionally, it may be considered to include people who have already experienced being a SV.

Regarding middle managers' role, they should be seen as role models and should be educated to understand that their role is to take care of the healthcare professionals, so the healthcare professionals can take care of the patients, so they must be educated in the SV phenomenon. They should support the programme implementation and foster its promotion. However, the exclusion of managers and middle management in the interview process with the SV should be contemplated.

Box 1 aims to describe the critical issues to be considered when designing a guideline for supporters. It includes recommendations on how to approach and handle interviews with SVs.

Resource operation

The access to the support intervention must be flexible and adjusted to the needs and resources available at any given time. Pathways and agents must be well described in the strategy and protocol, and it should exist regular evaluation of the operating model.

It can be activated at the request of the affected professional (SV), his or her immediate superior or colleagues, management, or on notification of the incident in the reporting systems established for this purpose. It should be considered that the request for support from the SV

may take days or even months from the occurrence of the incident.

In addition to this support being applied after notification of an adverse event, it could be applied in service/team/disciplinary meetings. Be part of the institution's action plan. (Portugal)

One possible way of identifying SVs is through the sessions or interviews held by the body responsible for patient safety and quality management at the centre with the aim of gathering the facts and conducting the root cause analysis of the adverse event. This meeting, during which questions related to the emotional impact of the incident sometimes emerge spontaneously, can be a good opportunity to inform professionals of the possibility of addressing these issues specifically and by a team designated for this purpose within the framework of the centre's response to each incident.

In our case, it is protocolised. A semistructured interview is conducted and if there are signs that indicate that a referral should be made, it is proposed directly and it is explained that it exists. (Spain)

The resource must be agile in response. The more peers who are available to provide support, the greater the availability and timeliness of the support. The first response should be provided within 24 hours of the event so that 24 hours/7 days a week availability is recommended. Sometimes, the SV's request for support might be delayed for weeks. In such situations, the support resource should ensure that they make the first contact within 24 hours of the request. In case of severe events, it is the responsibility of the line manager to provide immediate defusing before the staff leaves the workplace. Although it is recommended to have face-to-face support meetings, when possible, other channels such as video-call systems should also be available to ensure support in cases where physical presence is difficult.

First response should be provided within 24 hours of the event. (Denmark)

The support intervention should contemplate both individual and group intervention modalities. Although the most common preference is for individual support, group sessions incorporate elements of mutual support groups that, especially in the case of several professionals simultaneously affected by the same adverse event, can contribute satisfactorily to the recovery of the SV. Unit or organisation support can also be considered.

Although the commitment to confidentiality of those providing this support is implicit in the exercise of their professional work, it is advisable to verbally inform the SV that all information gathered during the support process will be confidential and will never be used without his/her prior authorisation. To guarantee the confidentiality of the information gathered during the meetings with the SV, no minutes will be taken or any other type of record of the sessions will be stored.



If necessary, the support structure must channel the processes of sick leave, follow-up and programmed reincorporation of the professional to the centre in coordination with the appropriate services (eg, Occupational Health or Occupational Risk Prevention). It should be supported and implemented based on individual needs and always assuring the confidentiality of the cause of the sick leave. For the reinstatement after an absence, it is advisable to have a detailed action flowchart. A dedicated temporary disability platform can monitor and drive reinstatement.

Caring for the patients and their relatives

Another process that must take place after an adverse event is the communication of the incident to the patient or their family. There is no one-size-fits-all approach to open disclosure of the adverse event to the patient. The position of institutions may differ slightly as to who should inform the patient of the adverse event and how. However, there is no doubt that the processes of informing the patient and supporting the SV should be coordinated and run in parallel. Concerning who should communicate what happened to the patient, the severity of the event, the emotional state and willingness of the professional, and the patient's preferences should be considered, although there is no doubt that open disclosure should be encouraged.

Finally, psychological and emotional support to the patient and their family should be part of the protocol. It can also be considered to have a social worker to help family members manage different aspects after the adverse event.

Psychological and emotional support to the patient and their family must be part of the protocol. (Finland)

DISCUSSION

In Europe and other regions worldwide, the number of health and care institutions considering the implementation of SV support programmes has been steadily increasing over the past decade.³⁰ Adopting appropriate safety practices within healthcare environments necessitates a fundamental shift in the current organisational culture and the effective introduction of interventions to enhance the resilience of HCWs.³⁸ The pioneering programmes ForYou²¹ and RISE²² are commonly regarded as benchmarks for establishing such initiatives. However, each institution has its own organisational culture, level of development in its safety culture, and degree of alignment or deviation from the principles of a just culture. This suggests that blindly emulating others may not always be advisable; support programmes should be tailored to the specific realities of each institution and to the social and legal frameworks of each country.

The analysis of leading European experiences in supporting SVs, enriched by the insights of participants with years of experience as leaders or supporters, offers valuable perspectives on designing new intervention programmes. This approach considers cross-country differences in legal frameworks (eg, Denmark and Belgium with No-Fault models vs other countries with Tort-based approaches) and the diverse organisational models within healthcare institutions, where public health systems are predominant.

Programmes addressing SVs still have a considerable distance to cover in providing supportive interventions beyond the immediate aftermath of a severe stressful event. Participants described common challenges faced by these institutions include determining initial considerations, securing peer supporters, disseminating information, building trust in the intervention and managing practical aspects of intervention delivery, such as channels for soliciting requests, frequency of sessions and training peer supporters. The findings of this study adhere to these premises and offer a minimal critical set of recommendations for designing an intervention to support SVs.

In the literature, these interventions are noted to aim directly at restoring the responsiveness of individuals and teams affected by the SV phenomenon. Enhancing resilience aligns with Safety II objectives and contributes to a patient safety-promoting culture. 19 These support IPs are expected to help reduce burnout, absenteeism, service rotations and professional attrition. They also improve healthcare quality by reducing defensive practices and clinical errors and by involving professionals in patient safety. Furthermore, they align with the WHO's 39 strategic objectives for 2021–2030, which include inspiring, educating and protecting HCWs as a component of designing and delivering safe care systems (Objective 5, health worker education, skills and safety). Recognising that patient and professional safety is a priority, a healthcare institution implementing a SV support intervention acknowledges that patient safety is unlikely to be achieved without professional safety.

Programmes like RISE, ForYou or YouMatter are well-regarded by the professionals who benefit from them 40 41 and contribute to cost reductions, quantified in the case of RISE at 22576.05 USD per professional per year. The benefits for the institution, professionals and peer supporters have been described by Busch *et al.* 19 These recommendations for extending support interventions are justified by these results.

These interventions are designed to break the vicious circle of loss of quality and well-being, as adapted by Boluarte⁴² and Schiess *et al*⁴³ avoiding risks for other patients and improving healthcare quality. They help understand the impact of non-intervention on patients, professionals and institutions. Interventions like the ones proposed here lead to thriving, including increased attention, caution and critical/self-critical responses, demonstrating greater resilience to adverse situations.

In Europe, the tort liability system is common in most countries. ³⁶ However, some of the most recognised IPs are being conducted in countries with different legal frameworks, such as no-fault compensation schemes and Sorry



Figure 1 Impact of safety culture on the implementation of second victim support programmes in healthcare institutions (adapted from Mira $et\ at^{47}$).

laws. This aspect is extremely relevant as it influences not only the elements of the IP designed and implemented but also the approach and counselling that can be applied. Moreover, in some countries, such as Italy more recently, there is specific legislation on patient safety that regulates the behaviour of the different stakeholders involved. Support programmes for SVs must not ignore this regulatory framework and must adapt to it. Although the human response is similar and there are many other similarities between countries regarding patient safety approaches, we must not forget that, particularly in this field, there are differences, for example, in the jurisprudence regarding professional liability in each country.

The recent proposal to include two new stages in the generally accepted intervention model, emphasising prevention and self-care, 20 presents an organisational challenge even for institutions already implementing these programmes. By involving the entire institution and its professionals, it should promote a shift in the safety culture and facilitate the spread of Just Culture principles. This conceptual development reflects advancements in risk management observed in the sector. In practice (see figure 1), intervention models are challenging to implement in institutions with a formal safety culture, feasible to implement when a reactive safety culture exists and essential when a safety-generating culture is embraced within the healthcare organisation. 44 This transition from a formal approach to a safety-generating culture must be accompanied by interventions, such as the one proposed here, that strengthen professionals' capacity to handle highly stressful situations.

Various studies in the literature present recommendations similar to those of this study for ensuring the success of interventions addressing the SV experience. In this case, the recommendations are organised based on leading experiences in Europe. However, it is important to consider that the Danish experience developed in a different legal environment than Southern European countries, affecting the ease of applying just culture principles. A national patient safety strategy that promotes these programmes also facilitate their subsequent implementation.

Future research could consider applying these recommendations by accounting for other factors such as age, gender, professional group, working experience and personality dimensions, which are known to affect the effectiveness of interventions.²⁰ The next steps should include standardising these interventions and obtaining external validation of their efficacy. Unlike the aviation sector or experiences in the USA, Europe lacks standardised certification for the skills of supporters or the content of training programmes. Therefore, developing certification and accreditation systems to standardise the qualifications and competencies required of peer supporters is recommended. This training should include information on the nature of the SV experience, needs and evolution, as well as training in communication and active listening skills to implement empathy and provide psychological first aid. It is essential to train peer supporters to identify warning signs and refer the SV to specialised support networks if necessary.

Strengths and limitations

This compendium of recommendations is based on experiences that are well-established, acceptable and effective. The proposals are systematically organised, considering critical points that must be addressed when designing interventions to support SVs. The recommendations are up to date with the latest conceptual developments and evidence on what works at this level.

Inevitably, the results may have been affected by the country-culture perspective. However, the study's objective was to establish general recommendations so that each country and centre could adapt them to their possibilities and characteristics, so the moderation of the focus groups was done under this premise. The participants from different countries' proposals on the defining characteristics of support interventions for SVs coincided. On some issues, there was some intra- and inter-country disagreement. One of the controversial issues was the possible definition of criteria for rejecting support requests in the case of incidents resulting from reckless or negligent acts by the professionals or trainees involved. Some experts suggested implementing strict rejection



criteria in these cases. In contrast, others emphasised the importance of considering various factors, such as continuity of professional activity in the institution, degree of experience and responsibility, and balance between learning and human accountability. Countries and institutions where a just culture exists address this challenge by defining criteria for rejection based on the nature of the event (honest mistake, reckless conduct or negligence). 32 44 45 Likewise, some differences were observed between countries in the distribution of time and intensity of discussion devoted to the multiple issues raised in the questions script. Those countries with more developed educational initiatives emphasised aspects affecting residents and students, while others invested more effort in discussing strategic and institutional policy issues. These observed differences between countries were understood as an intrinsic element of cross-cultural research. Their interpretation was done with this perspective to avoid bias in the results.

The culture and context regarding the conceptualisation of human fallibility and the legal framework of each country or region should be considered when evaluating these recommendations. This study has not analysed coping strategies that professionals individually employ to handle highly stressful situations. There may be factors associated with effective leadership in the successful experiences considered, which might not necessarily be present in the same manner in other contexts.

CONCLUSION

The implementation of SV support IPs is critical in fostering safety culture within healthcare institutions. While existing programmes like ForYou and RISE provide valuable benchmarks, each institution must tailor its approach to its unique organisational culture and legal context. Addressing common challenges and incorporating the latest conceptual developments can enhance the effectiveness of these interventions. Future efforts should focus on standardising training and certification processes for peer supporters, ensuring these programmes sustainability and broader adoption across diverse healthcare settings.

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REFERENCES

- 1 Boniol M, Kunjumen T, Nair TS, et al. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and "universal" health coverage? BMJ Glob Health 2022;7:e009316.
- 2 Bienassis K, Slawomirski L, Klazinga N. The economics of patient safety part IV: safety in the workplace occupational safety as the bedrock of resilient health systems. 2021.



- 3 Wu AW. Medical error: the second victim. The doctor who makes the mistake needs help too. BMJ 2000;320:726–7.
- 4 Vanhaecht K, Seys D, Russotto S, et al. An Evidence and Consensus-Based Definition of Second Victim: A Strategic Topic in Healthcare Quality, Patient Safety, Person-Centeredness and Human Resource Management. Int J Environ Res Public Health 2022;19:16869.
- Vanhaecht K, Seys D, Schouten L, 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;9:e029923.
- 6 Mira J, Carillo I, Tella S, et al. The European Researchers' Network Working on Second Victim (ERNST) Policy Statement on the Second Victim Phenomenon for Increasing Patient Safety. Public Health Rev 2024:45:1607175.
- 7 Strametz R. Second and double victims Achievements and challenges in ensuring psychological safety of caregivers. *J Healthc Qual Res* 2023;38:327–8.
- 8 Busch IM, Moretti F, Purgato M, et al. Psychological and Psychosomatic Symptoms of Second Victims of Adverse Events: a Systematic Review and Meta-Analysis. J Patient Saf 2020;16:e61–74.
- 9 Marung H, Strametz R, Roesner H, et al. Second Victims among German Emergency Medical Services Physicians (SeViD-III-Study). Int J Environ Res Public Health 2023;20:4267.
- 10 Krommer E, Ablöscher M, Klemm V, et al. Second Victim Phenomenon in an Austrian Hospital before the Implementation of the Systematic Collegial Help Program KoHi: A Descriptive Study. Int J Environ Res Public Health 2023;20:1913.
- 11 Rinaldi C, Ratti M, Russotto S, et al. Healthcare Students and Medical Residents as Second Victims: A Cross-Sectional Study. Int J Environ Res Public Health 2022;19:12218.
- 12 Ryder HF, Huntington JT, West A, et al. What Do I Do When Something Goes Wrong? Teaching Medical Students to Identify, Understand, and Engage in Reporting Medical Errors. Acad Med 2019;94:1910–5.
- 13 Strametz R, Koch P, Vogelgesang A, et al. Prevalence of second victims, risk factors and support strategies among young German physicians in internal medicine (SeViD-I survey). J Occup Med Toxicol 2021:16:11.
- 14 Venus E, Galam E, Aubert JP, et al. Medical errors reported by French general practitioners in training: results of a survey and individual interviews. BMJ Qual Saf 2012;21:279–86.
- 15 Makowska M, Wyleżałek J. A Qualitative Study of the Mistreatment of Medical Students by Their Lecturers in Polish Medical Schools. Int J Environ Res Public Health 2021;18:12271.
- 16 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;50:678–87.
- 17 Bushuven S, Trifunovic-Koenig M, Bentele M, et al. Self-Assessment and Learning Motivation in the Second Victim Phenomenon. Int J Environ Res Public Health 2022;19:16016.
- 18 Mira JJ, Lorenzo S, Carrillo I, et al. Lessons learned for reducing the negative impact of adverse events on patients, health professionals and healthcare organizations. Int J Qual Health Care 2017;29:450–60.
- 19 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. IJERPH 2021;18:5080.
- 20 Seys D, Panella M, Russotto S, et al. In search of an international multidimensional action plan for second victim support: a narrative review. BMC Health Serv Res 2023;23:816.
- 21 Scott SD, Hirschinger LE, Cox KR, et al. Caring for our own: deploying a systemwide second victim rapid response team. Jt Comm J Qual Patient Saf 2010;36:233–40.
- 22 Edrees H, Connors C, Paine L, et al. Implementing the RISE second victim support programme at the Johns Hopkins Hospital: a case study. BMJ Open 2016;6:e011708.
- 23 Schrøder K, Bovil T, Jørgensen JS, et al. Evaluation of the Buddy Study', a peer support program for second victims in healthcare: a

- survey in two Danish hospital departments. *BMC Health Serv Res* 2022:22:566
- 24 Leuven Institute for Healthcare Policy. Second victim. 2022. Available: https://www.kuleuven.be/samenwerking/ligb/oude-site/reseachlines/second-victims [Accessed 28 May 2024].
- 25 Mira JJ, Carrillo I, Guilabert M, et al. The Second Victim Phenomenon After a Clinical Error: The Design and Evaluation of a Website to Reduce Caregivers' Emotional Responses After a Clinical Error. J Med Internet Res 2017;19:e203.
- 26 Roesner H, Neusius T, Strametz R, et al. Economic Value of Peer Support Program in German Hospitals. Int J Public Health 2024;69:1607218.
- 27 Moran D, Wu AW, Connors C, et al. Cost-Benefit Analysis of a Support Program for Nursing Staff. J Patient Saf 2020;16:e250–4.
- 28 Chong RIH, Yaow CYL, Chong NZ-Y, et al. Scoping review of the second victim syndrome among surgeons: Understanding the impact, responses, and support systems. Am J Surg 2024;229:5–14.
- 29 Peddle M, Cross R, Parkinson-Zarb L. Simulation as an Element of Second Victim Recovery Programs Following Patient Safety Incidents: A Scoping Review. Clin Simul Nurs 2024;89:101512.
- 30 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;18:5080.
- 31 Guerra-Paiva S, Lobão MJ, Simões DG, et al. Key factors for effective implementation of healthcare workers support interventions after patient safety incidents in health organisations: a scoping review. BMJ Open 2023;13:e078118.
- 32 Boysen PG. Just culture: a foundation for balanced accountability and patient safety. *Ochsner J* 2013;13:400–6.
- 33 Glaser BG, Strauss AL, Strutzel E. The Discovery of Grounded Theory; Strategies for Qualitative Research. Nurs Res 1968;17:364.
- 34 Charmaz K, Thornberg R. The pursuit of quality in grounded theory. Qual Res Psychol 2021:18:305–27.
- 35 O'Brien BC, Harris IB, Beckman TJ, et al. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med 2014:89:1245–51.
- 36 Gil-Hernández E, Carrillo I, Tumelty M-E, et al. How different countries respond to adverse events whilst patients' rights are protected. Med Sci Law 2024;64:96–112.
- 37 Byrne D. A worked example of Braun and Clarke's approach to reflexive thematic analysis. Qual Quant 2022;56:1391–412.
- 38 Murthy VH. Confronting Health Worker Burnout and Well-Being. N Engl J Med 2022;387:577–9.
- 39 World Health Organization. Global patient safety action plan 2021-2030: towards eliminating avoidable harm in health care. World Health Organization: Geneva; 2021.
- 40 Connors ČA, Dukhanin V, March AL, et al. Peer support for nurses as second victims: Resilience, burnout, and job satisfaction. J Patient Saf Risk Manag 2020;25:22–8.
- 41 Merandi J, Liao N, Lewe D, et al. Deployment of a Second Victim Peer Support Program: A Replication Study. *Pediatr Qual Saf* 2017;2:e031.
- 42 Boluarte TA. The emotional impact of medical error involvement on physicians: A call for leadership and organizational accountability. Swiss Med Wkly 2008;138:9–15.
- 43 Schiess C, Schwappach D, Schwendimann R, et al. A Transactional "Second-Victim" Model-Experiences of Affected Healthcare Professionals in Acute-Somatic Inpatient Settings: A Qualitative Metasynthesis. J Patient Saf 2021;17:e1001–18.
- 44 Mira JJ. Understanding Honest Mistakes, Second Victims and Just Culture for Patient Safety. J Healthc Qual Res 2023;38:259–61.
- 45 Paradiso L. Rebuilding trust in just culture. Nurs Manage 2022;53:6–14.
- 46 Cobos-Vargas A, Pérez-Pérez P, Núñez-Núñez M, et al. Second Victim Support at the Core of Severe Adverse Event Investigation. Int J Environ Res Public Health 2022;19:16850.
- 47 Mira J, Madarasova Geckova A, Knezevic B, et al. Editorial: Psychological Safety in Healthcare Settings. Int J Public Health 2024;69:1608073.