



Medical Errors and the “Second Victim” Phenomenon in the Healthcare System: Implications for Patient Safety and Health Policy

ANNA GAWROŃSKA

Poznań University of Economics and Business, Department of Logistics

ORCID: <https://orcid.org/0000-0002-2411-8332>

Received: 13 May 2026; Revised: 23 June 2026; Accepted: 25 June 2026

Abstract

The second victim phenomenon refers to the emotional, psychological, and professional consequences for healthcare personnel after being involved in an adverse event. Although this concept was described more than two decades ago, it remains one of the most underestimated areas of patient safety. This article provides an indepth narrative synthesis of research on healthcare workers' experiences, analyzes organizational and systemic consequences, and identifies directions for health policy action. Particular emphasis is placed on organizational culture, support models, and barriers to implementation. The discussion and conclusions are combined to present the second victim phenomenon as a key indicator of the overall condition of the healthcare system.

Keywords: second victim phenomenon; support program; emotional and psychological reaction; healthcare worker; moral injury

1. Introduction

Medical errors and adverse events constitute a serious challenge to contemporary healthcare systems. According to analyses by Makary and Daniel (2016), they are among the leading causes of death in highincome countries, elevating them to the status of a major public health problem. However, the debate on patient safety is dominated by clinical and legal perspectives that focus primarily on the consequences for patients. Much less

attention is given to the impact of errors on healthcare professionals, who become the “second victims”: individuals who, in addition to bearing professional responsibility, struggle with guilt, fear, shame, and a loss of confidence in their abilities (Wu, 2000).

The second victim phenomenon is complex and multidimensional. It encompasses both acute emotional reactions and longterm psychological, professional, and organizational consequences. The literature on the subject states that this experience has a systemic character: it affects safety culture, the willingness to report incidents, staff turnover, organizational stability, and the overall quality of care (Seys et al., 2013). In many countries, structured support programs, such as RISE, forYOU, or MITSS, have been developed and integrated into quality and risk management frameworks (Edrees et al., 2016). In Poland, however, the topic remains marginalized and support for staff is unstructured and dependent on local practices (Kowalska et al., 2022).

The aim of this article is to present the current state of knowledge on the second victim phenomenon, analyze its implications for the healthcare system, and identify directions for organizational and policy action. Unlike previous reviews focusing primarily on psychological consequences, this article emphasizes organizational culture, implications for health policy, and resilience of healthcare systems in the context of the second victim phenomenon. The article is based on a narrative literature review and integrates psychological, organizational, and system-level perspectives.

2. Methods

This article is based on a narrative literature review, which enables a synthetic examination of this complex, multidimensional phenomenon. Unlike systematic reviews, the narrative approach can integrate empirical studies, theoretical analyses, organizational reports, and conceptual publications. This is essential in a field where the literature is dispersed and interdisciplinary and spans the medical sciences, psychology, organizational sociology, management, and health policy.

2.1. Search Strategy

The literature search was conducted in the PubMed, Scopus, and Google Scholar databases, covering publications from 2000–2024. Combinations of the following keywords were used: second victim, medical error, adverse event, patient safety, support programs, peer support, organizational culture, psychological safety, moral injury, healthcare workers, and just culture. Classic literature on patient safety (Kohn et al., 2000; Reason, 2000; Vincent, 2010) was also included, as it provides the theoretical foundation for contemporary analyses of the second victim phenomenon.

2.2. Inclusion and Exclusion Criteria

The analysis covered empirical studies (quantitative and qualitative), systematic reviews, organizational reports, conceptual articles, and publications describing the implementation of support programs. Papers focusing solely on patients, legal analyses without organizational or psychological components, and commentaries without data were excluded. Studies on moral injury, burnout, organizational culture, and psychological safety were included due to the close connection with the second victim phenomenon.

2.3. Analytical Process

The analysis was iterative, consisting of three stages. In the first stage, publications were selected based on titles and abstracts. In the second stage, full texts were analyzed in order to identify major thematic categories. In the third stage, a narrative synthesis was conducted, integrating findings from various disciplines. Particular attention was given to publications describing healthcare workers' experiences, support models, and implementation barriers, as well as literature on organizational culture, which forms a key context for the second victim phenomenon.

2.4. Methodological Limitations

The narrative nature of this review allows for broad interpretation and integration of the literature, but comes with limitations. The absence of a formal meta-analysis means that the results do not constitute a quantitative synthesis of the evidence. Moreover, the literature on the second victim phenomenon is methodologically diverse, hindering comparisons across studies. Nevertheless, the narrative approach is justified due to the complexity of the phenomenon and the need to account for organizational, cultural, and systemic contexts.

3. Results

The second victim phenomenon is currently one of the best-described, yet most neglected areas of patient safety. The literature consistently highlights its prevalence: according to Waterman et al. (2007), 30%–50% of physicians and nurses experience strong emotional reactions following an adverse event; in some specialties, particularly intensive care, surgery, and emergency medicine, the proportion may be even higher (Van Gerven et al., 2016). However, the phenomenon is not uniformly recognized or reported, due to cultural, organizational, and legal differences across countries (Kohn et al., 2000; Leape, 2015).

Research indicates that the second victim phenomenon is not merely an individual reaction, but a systemic issue revealing structural weaknesses in healthcare organizations. In blame-oriented cultures, staff are more likely to hide events, leading to under-reporting, a lack of rootcause analysis, and repeated errors (Dekker, 2011). In learning-oriented cultures, staff report events more readily, receive support, and participate in quality improvement processes (Edmondson, 2019). The second victim phenomenon thus becomes an indicator of a system's health: where workers are left on their own, the system is unable to learn or improve.

The findings can be grouped into four main areas: emotional and psychological reactions, professional and organizational consequences, support models, and barriers to implementation. Each area is essential for understanding the second victim phenomenon and its implications for health policy.

3.1. Emotional and Psychological Reactions of Healthcare Personnel

Healthcare workers involved in an adverse event often experience intense emotional reactions, described by Scott et al. (2009) as an “emotional tsunami.” These reactions include guilt, shame, fear of legal or professional consequences, and loss of confidence in one's abilities. Qualitative studies show that workers frequently feel isolated, uncertain about whether they can talk about the event, and fearful of judgment or stigmatization (Waterman et al., 2007).

The second victim phenomenon may lead to symptoms resembling PTSD, such as intrusive memories, avoidance of reminders, sleep disturbances, or hypervigilance (Seys et al., 2013). The literature also discusses moral injury, a profound violation of a worker's moral compass, accompanied by the sense of having failed the patient, the team, and oneself (Dean et al., 2019). Originally described in military contexts, moral injury is increasingly recognized among healthcare workers, especially during the COVID-19 pandemic (Williamson et al., 2020).

Studies also highlight the “second hit,” where emotional reactions intensify due to a lack of support from supervisors or colleagues (Denham, 2007). In many cases, it is not the adverse event itself, but the organization's response that determines the severity of the worker's suffering.

3.2. Professional and Organizational Consequences

The second victim phenomenon significantly affects professional functioning. Research shows decreased work efficiency, difficulties with concentration, avoidance of high-risk procedures, and increased sick leave (Edrees et al., 2016). Workers who do not receive

support are more likely to consider leaving the profession, particularly younger physicians and nurses (Busch et al., 2020). At the organizational level, this results in staff turnover, reduced quality of care, and higher costs.

A lack of support increases the likelihood of subsequent errors, creating a cycle of burden and risk. Organizations that ignore second victims' needs lose the capacity to learn from errors as well as staff (Reason, 2000; Vincent, 2010). In blame-oriented cultures, staff hide events, leading to underreporting, lack of analysis, and repeated mistakes (Dekker, 2011).

Some studies also indicate that the second victim phenomenon may affect relationships with patients. Workers often avoid patient contact or become overly cautious, which may delay clinical decisionmaking (Gallagher et al., 2003). The phenomenon therefore has a direct impact on the quality of care.

3.3. Second Victim Support Models

Support models have evolved alongside the development of patient safety. The first systemic initiatives emerged in the United States in the early 2000s, when it became clear that workers involved in adverse events received no assistance (Wu, 2000). The program MITSS (Medically Induced Trauma Support Services) was the first to integrate the perspectives of both patients and staff, emphasizing that medical trauma affects both sides of the clinical relationship (Conway et al., 2011).

The next stage involved institutional programs such as RISE (Resilience In Stressful Events) at Johns Hopkins Hospital and forYOU at the University of Missouri. These programs rely on trained peersupport teams that respond immediately after an event, offering conversation, emotional needs assessment, and referral when necessary (Edrees et al., 2016; Scott et al., 2010). Studies show that such programs improve staff well-being, strengthen safety culture, increase event reporting, and reduce turnover (Moran et al., 2021).

Development has been slower in Europe, though initiatives do exist in the UK, the Netherlands, Spain, and Scandinavian countries. In the UK, the NHS introduced the Just Culture framework and psychological support tools for staff (NHS Improvement, 2018). The Netherlands developed a peer support model embedded in clinical teams, one of the best-described European approaches (Van Gerven et al., 2016).

In Poland, systemic solutions are lacking. Support for workers after adverse events is inconsistent, often incidental and dependent on local practices. Studies show that staff express a need for support, but do not know where to seek it and that organizational culture often discourages emotional disclosure (Kowalska et al., 2022).

3.4. Barriers to Implementation

The most frequently cited barriers were blame culture, hierarchical structures, legal concerns, lack of leadership training, staffing shortages, and workload pressures. In many organizations, there is a persistent belief that a “good professional copes alone,” which contradicts scientific evidence on trauma and burnout. These barriers are both cultural and structural, meaning that overcoming them requires action at the health policy level, not only within individual institutions. In resource-limited healthcare systems, implementation of second victim support programs may begin with low-cost peer support initiatives, leadership training, and the integration of psychological safety principles into existing patient safety structures.

4. Discussion and Conclusions

The second victim phenomenon is one of the most underestimated yet most telling elements of patient safety. The literature emphasizes that the way the healthcare system responds to a medical error is just as important as the error itself. It is the organization’s reaction, not merely the event, that determines whether the worker experiences short-term stress or long-term trauma. This, in turn, may lead to burnout, leaving the profession, or severe psychological disorders (Scott et al., 2009; Seys et al., 2013).

In countries that have implemented second victim support programs, a clear improvement in safety culture has been observed. Programs such as RISE or forYOU not only provide immediate emotional assistance, but also strengthen a culture of openness, reduce fear of reporting events, and increase willingness to participate in error analysis processes (Edrees et al., 2016; Moran et al., 2021). In organizations where support is systemic, employees report a greater sense of psychological safety, which fosters learning and prevents further errors (Edmondson, 2019).

In Poland, the absence of such programs is particularly acute. Studies indicate that employees often do not know where to seek help and organizational culture in many institutions is still based on blame, hierarchy, and silence (Kowalska et al., 2022). Potential barriers to implementation in Poland include staffing shortages, hierarchical organizational culture, a fear of legal consequences, and limited institutional resources dedicated to psychological support for staff. Under such conditions, the second victim phenomenon becomes not only an individual problem, but also an indicator of systemic weakness. Organizations that do not provide support lose staff, suffer lower quality of care, and face higher risk of repeated errors.

The second victim phenomenon should be treated as part of a broader discussion on organizational culture in healthcare. Systems that promote openness, learning, and psychological safety are more resilient to errors and more capable of analyzing them.

In such environments, employees are not afraid to speak about their experiences. Moreover, organizations can implement effective corrective actions. In contrast, systems based on blame and hierarchy reinforce silence, isolation, and the recurrence of errors (Dekker, 2011; Reason, 2000).

The conclusions drawn from the literature are clear: the second victim phenomenon must be understood not only as an organizational challenge, but also as a systemic issue with direct implications for health policy. While organizational responses – such as peer support, leadership communication, and psychological safety – remain essential, they are insufficient without a broader policy framework that embeds the needs of both patients and healthcare professionals into the foundations of the healthcare quality system.

Importantly, the perspectives of patients and healthcare workers should not be treated as separate or competing. A mature safety culture integrates both viewpoints, recognizing that the wellbeing of staff is a prerequisite for safe, high-quality care. Systems that protect only the patient's perspective and ignore the emotional and professional consequences for staff create conditions that weaken learning and transparency. These conditions also reduce the long-term resilience of the system.

In the Polish context, this discussion is particularly relevant given the recent legal regulation on the principles of healthcare quality and the patient safety system. The regulation establishes a framework for reporting incidents, monitoring quality, and organizational accountability. It does not yet fully address the needs of second victims nor does it specify standards for staff support following adverse events. The findings of this review therefore provide a meaningful contribution to the ongoing debate on the adequacy of existing legal provisions and the potential need for legislative refinement.

From a policy perspective, several indications emerge. Firstly, national patient safety strategies should explicitly recognize the second victim phenomenon as a systemic indicator of healthcare quality. Secondly, accreditation and regulatory standards could incorporate requirements for structured support programs, including peer support, leadership training, and psychological services. Thirdly, national monitoring systems could collect data not only on adverse events, but also on staff experiences, support needs, and organizational responses. Fourthly, legislative frameworks could clarify institutional responsibilities for providing support and protecting staff from punitive consequences that discourage reporting.

Ultimately, the second victim phenomenon serves as a diagnostic lens through which the maturity of the healthcare system can be assessed. Systems that acknowledge and support the emotional and professional needs of healthcare workers demonstrate greater capacity for learning, transparency, and continuous improvement. Systems that fail to do so risk perpetuated silence, repeated errors, and workforce attrition. For these reasons, integrating second victim support into health policy should be considered a strategic priority and aligned with broader efforts to strengthen patient safety and healthcare system resilience.

Research funding: This publication did not receive any external financial support.

Statement from the relevant ethics committee: The study was not reviewed by an ethics committee. Participation in the study was voluntary. All participants were informed about the purpose of the study, confidentiality policies, and the option to withdraw from participation at any stage. Informed consent was obtained from the participants for their participation in the study.

Conflict of interest: The authors declare that there is no conflict of interest related to the publication of this study.

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