





# Peer support by interprofessional health care providers in aftermath of patient safety incidents: A cross-sectional study

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## Abstract

**Aim:** To investigate the health care professionals' preferences pertaining to support in the aftermath of patient safety incidents and potential variation thereof depending on the degree of harm.

**Background:** Peer support systems are available to support health care professionals in the aftermath of patient safety incidents. It is unclear which type of support is best offered by whom.

**Methods:** A cross-sectional study in 32 Dutch hospitals.

**Results:** In total, 2,362 nurses and 1,404 doctors indicated they were involved in patient safety incidents at any time during their career (86%). Less than 10% of health care providers had spoken with professional support, and less than 20% admitted a need to do so. They used different support. A higher degree of harm related to higher odds of desiring support. Respondents mainly wanted to understand what happened and how it can be prevented.

**Conclusion:** The desired support of health care professionals in the aftermath of patient safety incidents depends on the level of harm.

**Implication for nursing management:** Health care professionals seem to mostly rely on persons they are close with, and they mainly desire information related to the aftermath of patient safety incidents. This should be taken into account when support programmes are set up.

## KEYWORDS

health personnel/psychology, hospitals, patient safety, peer support

## 1 | BACKGROUND

A patient safety incident (PSI) is defined as 'an event or circumstance that could have resulted or did result in unnecessary harm to a patient' (p. 16) (World Health Organization, 2009). Interprofessional teams and individual health care professionals experience personal and professional sequelae in the aftermath of a PSI (Nydo

et al., 2020; Schiess et al., 2018; Seys, Scott, et al., 2013; Seys, Wu, et al., 2013; Wu, 2000). These personal and professional sequelae are coined by the term 'second victim' ('a health care provider involved in an unanticipated adverse patient event, medical error and/or a patient-related injury who becomes victimized in the sense that the provider is traumatized by the event'; Scott et al., 2009). Frequently, second victims feel personally responsible for the unexpected patient

outcomes and feel as though they have failed their patient, and feel doubts about their clinical skills and knowledge base. Although the designated term 'second victim' is giving rise to debate about its appropriateness (Clarkson et al., 2019; Wu et al., 2017), affected health care professionals need to be supported in order to be able to provide quality care. A PSI may not only have serious impact on professional functioning and effective teamwork but also affects personal well-being (Coughlan et al., 2017; Nydoo et al., 2020; Seys, Wu, et al., 2013; Van Gerven, Vander Elst, et al., 2016; Vanhaecht et al., 2019; Wu et al., 2020). A frequently reported symptom is hypervigilance. Other commonly reported symptoms include questioning one's knowledge and skills, feeling unable to provide quality care and feeling uncomfortable within the team. In general, the higher the degree of patient harm, the longer the involved health care professionals may experience such symptoms (Vanhaecht et al., 2019). Being involved in a PSI can also lead to more defensive medicine and changes in work habits (Panella et al., 2016; Baas et al., 2018). Health care professionals in general report several coping mechanisms to alleviate such symptoms. An important coping mechanism includes social support from colleagues, family, hospital management and friends, albeit that such interactions are felt to be meaningful to some extent (Johnson et al., 2019; Kable et al., 2018; Baas et al., 2018; Seys et al., 2013a; Seys, Wu, et al., 2013).

About one in three Dutch gynaecologists indicated preference to talk to a designated professional such as a psychologist or counsellor (Baas et al., 2018). Health care professionals seek collegial trust, reassurance and recognition of their decisions and actions. They want to understand what happened and how it can be prevented in the future. They also seek information about the organisation expectations regarding formal investigation of the PSI (Kable et al., 2018). In addition to discussing the case in a root cause analysis meeting or audit, finding distraction, and practice sports or other stress-reducing activities and hobbies are other often-reported coping mechanisms (Seys, Wu, et al., 2013).

Although some peer support systems are described in recent literature, it remains unclear (Scott, 2010; Seys, Scott, et al., 2013) what type of support is best offered to health care providers in the aftermath of a PSI and who can provide such support (Johnson et al., 2019). The aim of this study therefore was to investigate health care professional's (nurses and doctors) preferences pertaining to support in the aftermath of a PSI and potential variation depending on the level of patient harm.

## 2 | METHODS

### 2.1 | Research setting

Thirty-two hospitals in the Netherlands participated in this cross-sectional study, part of the 'Peer Support Collaborative' (Vanhaecht et al., 2019). This collaborative comprises a variety of large and small, rural and urban, and (non)-teaching and (non)-academic hospitals and represents approximately one-third of all Dutch hospitals.

The collaborative aims to determine the needs of their second victims and to define a peer support programme that fits their specific organisational patient safety culture. As part of this programme, a standardized questionnaire was distributed among nurses and doctors in each hospital, in order to determine their specific needs.

### 2.2 | Participants

In total, 32 hospitals conducted the survey between 14 April 2016 and 23 November 2018. Each hospital invited all their nurses and doctors working in direct patient care via email to participate in an online survey under auspices of the KU Leuven. The online survey was available for 4 weeks, and a reminder was sent after 3 weeks. Each respondent could only participate once. The online survey was distributed by the contact person participating in the 'Peer Support Collaborative'. According to the regulations in Dutch hospitals, the survey's instructions clearly mentioned that completing the questionnaire implied informed consent to participate. Participation was entirely voluntary, and confidentiality and anonymity were guaranteed at all times.

### 2.3 | Data collection

The questionnaire contained four distinct parts. Respondent demographics (profession, years of experience, years of experience in this hospital, type of ward (surgical or non-surgical) and gender) were pertained in the first part. The next part surveyed the presence or absence of personal involvement in a PSI (during the entire career and during the previous 6 months), and in case of an affirmative answer, the degree of patient harm (no harm, temporary harm, permanent harm and death) was questioned. Next, specific symptoms and the duration of them were questioned. Last, health care professionals were asked about support systems in the aftermath of the index case PSI they were involved in. This comprised type of support they received and type of support they had preferred. The following options were provided in the questionnaire: direct colleague from own department, other involved team members, spouse, other colleague with similar experience, department team leader, patient or involved family, friends outside organisation, other team leader, neutral person in the organisation, psychologist/counsellor, general practitioner, someone in HR department and insurance doctor. Response categories were as follows: 'haven't talked with them because felt no need to', 'haven't talked with them but had need to', 'have talked with them and this was a negative experience' and 'have talked with them and this was a positive experience'. Related to the specific topics health care professionals wanted to discuss with a support person following a PSI, the following 6 options were provided: (a) details of the PSI—what happened and how could this have happened?; (b) questions about what's next—what will happen and what should happen?; (c) acknowledging the error—do not sweep the problem under the carpet; (d) perspective regarding feelings of

guilt—someone, for example colleague, who tells you that it could have happened to anyone; (e) need additional support—additional support in own organisations, for example someone who you can turn to for advice or guidance; and (f) time out—need for time out. Response categories for the latter were 'no need', 'some need' and 'much need'.

Several steps were performed in the development of the instrument. First of all, a literature search was performed, which identified several symptoms, which can be increased in the aftermath of a PSI (Seys, Scott, et al., 2013; Seys, Wu, et al., 2013). In the next step, 31 in-depth interviews, with physicians, nurses and midwives, were performed to examine the experienced symptoms in the aftermath of a PSI and the needed support (Van Gerven, Bruyneel, et al., 2016). Based on the previous 2 steps, a Belgian and Italian research team identified the items to be included in the questionnaire (Content validity). Next, the questionnaire was set up and tested on face validity in a small group of respondents in 3 different hospitals. Finally, the questionnaire was discussed, improved and finalized during several meetings of the 'Peer Support Collaborative' where 30 Dutch hospitals were presented. Up to date, the questionnaire used in this study was used in different studies published in other international peer-reviewed journals (Van Gerven, Deweer, et al., 2016; Vanhaecht et al., 2019; Zeeman et al., 2020).

## 2.4 | Statistical analysis

Only completed questionnaires were included in the analysis. Descriptive data included demographic variables, the degree of PSI-related patient harm during the entire career and during the previous 6 months, designated support person in the aftermath of a PSI and need for support. Logistic regression analysis was performed to assess differences between nurses and doctors. We binarized the multinomial response categories into 'talked' and 'not talked'. 'Talked' included 'have talked with them and this was positive experience' and 'have talked with them and this was negative experience'. 'Not talked' included 'haven't talked with them because felt no need to' and 'haven't talked with them but felt need to'. The reference category was 'not talked'. Similarly, two categories 'no need' and 'need' were created. Need included 'some need' and 'much need'. The reference category was 'no need'. Covariates were level of harm and professional group, and the reference categories were respectively no harm and doctors. SAS V9.4. was used for descriptive and logistic regression analyses.

## 3 | RESULTS

A total of 6,508 participants in 32 participating hospitals completed the questionnaire. In total, 5,572 respondents (3,634 nurses and 1,938 doctors) reported that they had been involved in a PSI at least once during their career (86%). 3,766 of these (2,362 nurses and 1,404 doctors) completed the questions regarding support in the

**TABLE 1** Participant characteristics and involvement in patient safety incidents

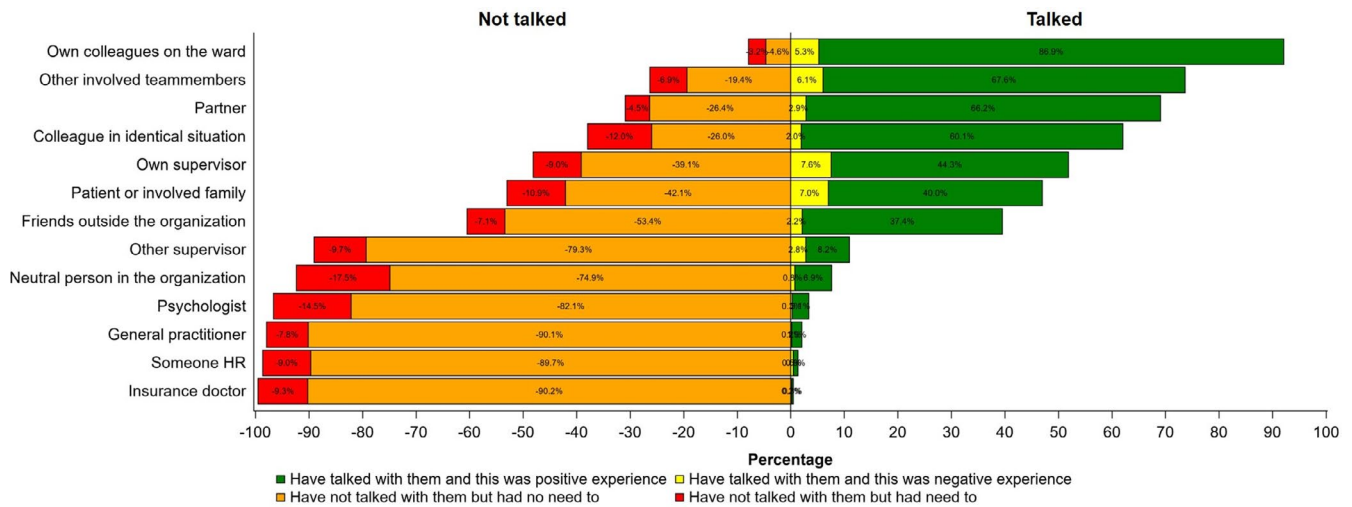
	Nurses (n = 2,362)	Doctors (n = 1,404)	Overall (n = 3,766)
Gender			
Male, n (%)	311 (13.2%)	643 (45.8%)	954 (25.3%)
Years of experience, mean (SD)	18.0 (12.0)	10.9 (8.5)	15.0 (11.4)
Type of department			
Surgical department, n (%)	685 (29.0%)	489 (34.8%)	1,174 (31.2%)
Non-surgical department, n (%)	1,207 (51.1%)	779 (55.5%)	1,986 (52.7%)
Surgical and non-surgical department, n (%)	470 (19.9%)	136 (9.7%)	606 (16.1%)
Degree of harm of PSI during entire career (n = 3,766)			
No harm, n (%)	773 (32.7)	165 (11.8)	938 (24.9)
Temporary harm	809 (34.3)	328 (23.3)	1,137 (30.2)
Permanent harm	258 (10.9)	313 (22.3)	571 (15.2)
Death	522 (22.1)	598 (42.6)	1,120 (29.7)
Degree of harm of PSI during previous 6 months (n = 2,084)			
No harm, n (%)	759 (60.3)	304 (36.8)	1,063 (51.1)
Temporary harm	336 (26.7)	278 (33.7)	614 (29.4)
Permanent harm	56 (4.5)	111 (13.4)	167 (8.0)
Death	107 (8.5)	133 (16.1)	240 (11.5)

aftermath of a PSI. Table 1 summarizes the demographic information of these respondents.

Forty-five per cent of respondents (33% nurses and 64.9% doctors) replied that they had been involved in a PSI with permanent harm or death at least once in their career. One in five respondents replied that this had been the case for them in the past 6 months (Table 1).

### 3.1 | Health care professional's preference for support person

Figure 1 displays preference pertaining the specific support person by nurses and doctors in the aftermath of a PSI. The majority of respondents preferred support by people they are close with professionally or personally, such as colleagues within own department (92.1%), other involved team members (73.7%), their spouse (69.1%), other



**FIGURE 1** Overview of different support persons

colleague with similar experience (62.1%) and their own department team leader (51.9%). The respondents generally reported a positive experience looking back at such encounters. Less than half (47%) of the respondents had talked with the patient or involved family, and about four in five of these encounters were perceived as positive by the respondents. Doctors talked more often to the patient or involved family ( $OR = 0.455, p < .001$ ) than nurses. Four in ten (39.5%) respondents talked with friends outside the organisation. Apart from other colleagues with similar experience, respondents rarely indicated support from health care professionals who are external to their organisational unit and also felt no need to do so, such as 'insurance doctor' (90.2%), 'general practitioner' (90.1%), 'someone in human resources (HR)' (89.7%), 'psychologist/counsellor' (82.1%), 'other team leader' (79.3%) and 'neutral person in organisation' (74.9%).

Only 1.7% (65 out of 3,766 respondents) mentioned that they have not talked and did not feel the need to talk with anybody. Compared with doctors, nurses talked more often with other involved team members ( $OR = 1.255, p = .006$ ), a colleague with similar experience ( $OR = 1.353, p < .001$ ), own team leader ( $OR = 2.802, p < .001$ ), psychologist/counsellor ( $OR = 1.591, p = .019$ ) and someone in HR ( $OR = 2.016, p = .029$ ). Compared with nurses, doctors talked more often with their spouse ( $OR = 0.682, p < .001$ ), the patient or involved family ( $OR = 0.455, p < .001$ ) and friends outside the organisation ( $OR = 0.585, p < .001$ ) (Table 2).

A higher degree of patient harm was related to higher odds of needing support. For example, compared with no harm, temporary harm ( $OR = 1.451, p = .015$ ), permanent harm ( $OR = 1.566, p = .025$ ) and death ( $OR = 1.935, p < .001$ ) were significantly associated with higher odds of needing support from a colleague of the own department (Table 2).

### 3.2 | Type of support needed by health care professionals

In the aftermath of a PSI, health care professionals indicated much need for information about details of the PSI (61.4%), followed by

information on what's next (58.9%). 44% needed additional support, and 17% needed a time out (Figure 2).

In total, 4.8% (179 out of 3,766 respondents) mentioned that they had 'no need' for any of six supposed support mechanisms mentioned in Figure 2. This was the case for 5.2% of the nurses ( $n = 124$ ) and 4% of the doctors ( $n = 55$ ). 39 of them (21.8%, 16 nurses and 22 doctors) were involved in a PSI with permanent harm or death. These were 53 nurses (2.2%) and 12 doctors (0.9%). Nine of them (14%, 6 nurses and 3 doctors) were involved in a PSI with permanent harm or death (Figure 2).

Compared with doctors, nurses indicated more need for support pertaining to acknowledgement of the error ( $OR = 1.217, p = .027$ ). Compared with nurses, doctors indicated more need for support related to feelings of guilt ( $OR = 0.577, p < .001$ ) and need for a time-out period ( $OR = 0.818, p = .032$ ) (Table 3).

Again, a higher degree of patient harm was related to higher odds of needing support. For example, compared with no harm, death ( $OR = 3.156, p < .001$ ) and permanent harm ( $OR = 2.210, p < .001$ ) were significantly associated with higher odds of need for time out.

## 4 | DISCUSSION

In this study, in approximately one-third of all Dutch hospitals, three out of four health care providers involved in a PSI were involved in at least one PSI with temporary harm, permanent harm or death during their entire career. In the aftermath of a PSI, 52% of health care providers sought support by talking with a person they were close with professionally or personally, for example a colleague, team member, partner, patient or friend, and found this to be a positive experience. Compared with doctors, nurses talked significantly more with, for example, other involved team members or a colleague who had been in an identical situation. Compared with nurses, doctors talked significantly more with, for example, their partner or the patient or involved family.

**TABLE 2** Overview of preferred support persons for level of harm and profession

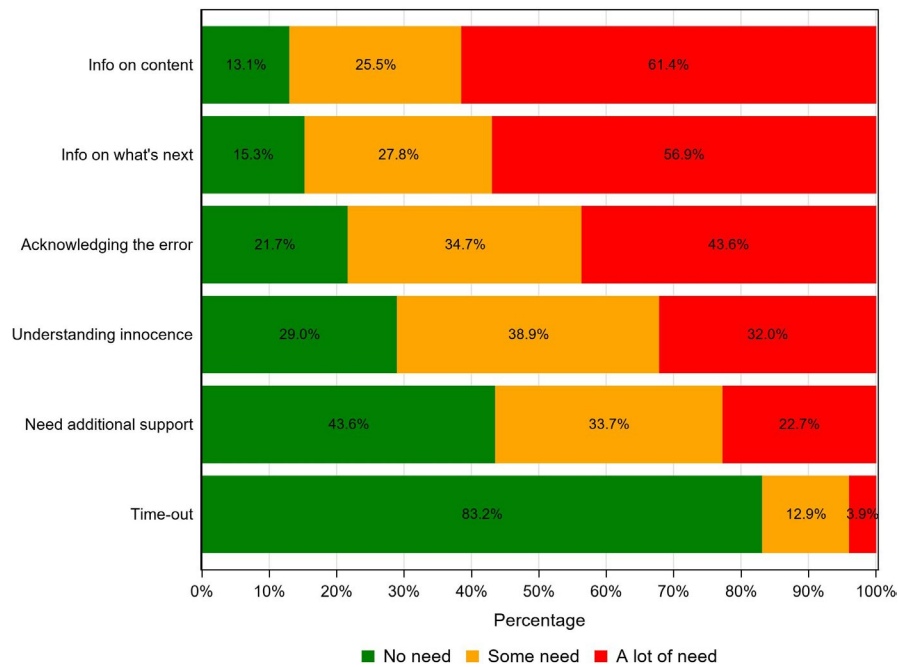
	Death versus no harm OR (95% CI), p-value	Permanent harm versus no harm OR (95% CI), p-value	Temporary harm versus no harm OR (95% CI), p-value	Nurses versus Doctors OR (95% CI), P-value
Colleagues within own department	1.935 [1.383–2.709], <i>p</i> < .001	1.566 [1.059–2.315], <i>p</i> = .025	1.451 [1.074–1.961], <i>p</i> = .015	0.981 [0.752–1.279], <i>p</i> = .888
Other involved team members	2.209 [1.795–2.717], <i>p</i> < .001	1.723 [1.354–2.192], <i>p</i> < .001	1.562 [1.291–1.889], <i>p</i> < .001	1.255 [1.069–1.473], <i>p</i> = .006
Spouse	2.268 [1.856–2.771], <i>p</i> < .001	1.890 [1.489–2.397], <i>p</i> < .001	1.222 [1.022–1.462], <i>p</i> = .028	0.682 [0.582–0.799], <i>p</i> < .001
Colleague with similar experience	1.182 [0.982–1.422], <i>p</i> = .077	1.476 [1.180–1.846], <i>p</i> < .001	1.298 [1.085–1.553], <i>p</i> = .004	1.353 [1.172–1.562], <i>p</i> < .001
Own team leader	2.274 [1.881–2.748], <i>p</i> < .001	1.940 [1.552–2.425], <i>p</i> < .001	1.562 [1.307–1.867], <i>p</i> < .001	2.802 [2.419–3.246], <i>p</i> < .001
Patient or involved family	1.263 [1.049–1.519], <i>p</i> = .014	1.553 [1.247–1.935], <i>p</i> < .001	1.137 [0.951–1.360], <i>p</i> = .158	0.455 [0.395–0.524], <i>p</i> < .001
Friends outside organisation	2.558 [2.107–3.106], <i>p</i> < .001	2.039 [1.624–2.559], <i>p</i> < .001	1.501 [1.239–1.818], <i>p</i> < .001	0.585 [0.507–0.675], <i>p</i> < .001
Other team leader	2.590 [1.890–3.550], <i>p</i> < .001	2.170 [1.507–3.126], <i>p</i> < .001	1.550 [1.121–2.144], <i>p</i> = .008	1.136 [0.911–1.416], <i>p</i> = .259
Neutral person in the organisation	3.525 [2.343–5.302], <i>p</i> < .001	2.908 [1.837–4.602], <i>p</i> < .001	1.920 [1.254–2.940], <i>p</i> = .003	0.906 [0.703–1.169], <i>p</i> = .449
Psychologist/counsellor	4.286 [2.393–7.678], <i>p</i> < .001	2.489 [1.240–4.995], <i>p</i> = .010	1.746 [0.933–3.269], <i>p</i> = .081	1.591 [1.078–2.347], <i>p</i> = .019
General practitioner	3.208 [1.556–6.617], <i>p</i> = .002	2.017 [0.850–4.784], <i>p</i> = .111	1.583 [0.731–3.427], <i>p</i> = .244	1.034 [0.643–1.663], <i>p</i> = .890
Someone in the HR department	2.704 [1.222–5.985], <i>p</i> = .014	2.796 [1.149–6.805], <i>p</i> = .024	0.682 [0.253–1.840], <i>p</i> = .450	2.016 [1.076–3.776], <i>p</i> = .029
Insurance doctor	1.602 [0.455–5.633], <i>p</i> = .463	1.174 [0.250–5.517], <i>p</i> = .839	0.608 [0.103–2.738], <i>p</i> = .517	0.877 [0.327–2.351], <i>p</i> = .795

In contrast, less than 10% of health care providers had talked with professional support and less than 20% indicated a need to do so, even if they were involved in severe incidents. The type of desired support in the aftermath of a PSI mainly pertained to understand what happened and how such a PSI can be prevented in the future (86.9%) and information on what's next as far as quality improvement measurements (84.7%). A higher degree of harm was in most instances related to a steady and statistically significantly higher odds of the desire for support.

Health care professionals indicated preferences and the degree of need they felt for support. The results of this study show that a large number of health care providers involved in a PSI do not (actively) seek support in the aftermath of a PSI. Three possible explanations can be hypothesized. First, it is possible that health care professionals indeed do not need support. Not everyone suffers from symptoms in the aftermath of a PSI or best do so in solitude. Second, considering the contemporaneous safety culture in hospitals, in which blame and shame still exists, they may experience a taboo on reaching out for support and share experiences about the involvement in a PSI. Organisations should shift from 'blame culture' to 'just culture', where health care organisation balances between punitive and non-punitive approaches (White & Delacroix, 2020).

During the COVID-19 pandemic, 82% of the respondents talked with their partner and found that this was a positive experience, compared with 66.2% in the current study. The same trend was found for talking with friends (Vanhaecht et al., 2021). This strengthens our hypothesis that there is taboo of asking support and in particular professional support. Last, health care providers may not be aware of the potential benefit of support and are not aware of the potential personal and professional impact in the aftermath of a PSI nor of the potential benefit of support. Therefore, (inter)national awareness should be created.

The data we now present indicate that programmes to support health care professionals in the aftermath of a PSI best provide specific content. First of all, this should contain details of the type of PSI (regarding medication, regarding patient identification, ...), severity of patient harm (no harm, temporary harm, permanent harm, death) and elucidating the potential contributing factors for the PSI to happen in the first place. In addition, health care providers involved in a PSI want to know on the next steps pertaining to quality and safety measures and reporting (e.g. formal complaints and lawsuits) as this put and additional layer of stress on health care professionals (Zeeman et al., 2020). Last, health care professionals need to get the opportunity to take a time out for a short or longer time period.



**FIGURE 2** Overview of need for specific type support

**TABLE 3** Need for specific support by level of harm and profession

	Death versus no harm OR (95% CI), p-value	Permanent harm versus no harm OR (95% CI), p-value	Temporary harm versus no harm OR (95% CI), p-value	Nurses versus doctors OR (95% CI), p-value
Info on details of the PSI	3.693 [2.772–4.920], $p < .001$	2.458 [1.783–3.388], $p < .001$	1.783 [1.412–2.251], $p < .001$	1.198 [0.968–1.484], $p = .097$
Info on what's next	3.558 [2.728–4.641], $p < .001$	2.646 [1.946–3.597], $p < .001$	1.720 [1.382–2.140], $p < .001$	1.195 [0.978–1.460], $p = .081$
Acknowledging the error	2.926 [2.343–3.654], $p < .001$	2.205 [1.705–2.853], $p < .001$	2.049 [1.676–2.504], $p < .001$	1.217 [1.023–1.448], $p = .027$
Perspective on feelings of guilt	0.977 [0.802–1.190], $p = .819$	1.170 [0.18–1.489], $p = .204$	1.077 [0.891–1.301], $p = .442$	0.577 [0.492–0.678], $p < .001$
Need for additional support	3.004 [2.489–3.626], $p < .001$	2.114 [1.698–2.632], $p < .001$	1.575 [1.322–1.876], $p < .001$	0.891 [0.771–1.029], $p = .117$
Time out	3.156 [2.420–4.114], $p < .001$	2.210 [1.623–3.010], $p < .001$	1.325 [0.999–1.758], $p = .051$	0.818 [0.681–0.983], $p = .032$

The results of the study here described imply that continuous awareness around the personal and professional sequelae of PSI should be an integral part of the ongoing culture change in health care. In a 'just culture', there is a safe learning environment starting from the perspective of the health care professional (Laarman, 2019).

Approximately 50% of the surveyed health care professionals had talked with the patient or involved family and about four in five of these encounters were perceived as positive by the respondent. Indeed, 'open disclosure' can be helpful both for the patient and family and for the involved team members, and particularly relates to the issue of re-establishing trust between patient and provider. Patients and their families want to know what happened, why it happened, what is being done to limit the damage, and which actions are taken (what is learnt?) to prevent the occurrence of similar PSI in the future. Based on previous research on the topic of second victim (Schiess et al., 2018; Vanhaecht et al., 2019), we conclude that

not only patients but also health care professionals are in need of open communication to understand what happened and how they can thrive for excellence.

The strength of this study is its inclusion of approximately one-third of all Dutch hospitals, and therefore, significant generalizability is permitted. However, the study also knows several limitations. First, this study is not a random sample as the participating hospitals vary in size, location and function. Second, causal inferences between symptoms, level of harm and needed support cannot be made due to the cross-sectional nature of this study. In addition, the cross-sectional study design limits the evaluation of changes in desire for support and sources for support over time. Third, since the questionnaire was distributed in several ways (by email, intranet, chairman/department manager etc.) we cannot reliably estimate the number of health care professionals who have received and read the invitation to participate in this study. Therefore, response bias and recall bias are inherent



limitations related to this kind of surveys. Recall bias is mainly due to the time that has passed since the PSI has occurred, and participants may have exaggerated or minimized the PSI and support in the aftermath of the PSI.

An important challenge for health care professionals, managers, board members and policymakers pertains to adequate, efficient and timely support of health care professionals in the aftermath of a PSI. In the Netherlands, the 'inspection for health care' (Inspectie Gezondheidszorg en Jeugd (IGJ), an independent government body, is responsible for and oversees quality of health care. The IGJ, among others based on this research conducted by the Dutch Peer Support Collaborative', advocates the availability of a peer support programme for organisations providing patient care as part of the overall quality management system.

Futures studies should therefore focus on how organisations can best incorporate a *patient safety and quality of care programme* that structurally provides support of health care professionals in the aftermath of a PSI. In this context, longitudinal evaluation of the patient safety culture, evolution of clinical behaviour and attitude pertaining to the personal and professional aftermath of a PSI on health care providers are imperative. Research is needed to evaluate the clinical behaviour and attitude changes, by health care professionals, when involved in a PSI. Not only the negative changes should be included, for example avoiding risks, but also positive changes, for example more critical thinking, open discussion of PSI or near misses, reviewing the latest evidence-based practices, following teaching courses regarding this topic.

## 5 | CONCLUSION

The challenges for nurse managers responsible for arranging health care professionals' support in the aftermath of a PSI may not be underestimated. Nurses and physicians in a large sample of Dutch hospitals seem to mostly rely on persons they are close with, and to a much lesser extent seek professional support. The higher the degree of harm, the more the support health care professionals seek. In addition, they mainly desire information related to understanding what happened and why the PSI happened. Future studies should focus on optimizing support in order to reduce potential detrimental impact of a PSI on the involved health care professional.

## 6 | IMPLICATIONS OF NURSING MANAGEMENT

Based on these research hospitals, nursing management and inter-professional teams are facilitated in optimizing the focus of their peer support systems. This system should be different based on the level of harm. The higher the degree of harm, the more the support should be available. Important aspects include level of harm, and information related to PSI details and the organisation's safety

and quality measures. Most importantly, support by colleagues from own department and colleagues with similar experiences from other departments is highlighted in the data provided.

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### CONFLICT OF INTEREST

None declared.

### ETHICAL APPROVAL

No ethical approval is needed. According to the regulations in Dutch hospitals, the survey's instructions clearly mentioned that completing the questionnaire implied informed consent to participate. Participation was entirely voluntary, and confidentiality and anonymity were guaranteed at all times.

### DATA AVAILABILITY STATEMENT

All data relevant to the study are included in the article.

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