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Team efficacy and leadership in managing aggressive situations in the general hospital setting. A qualitative descriptive analysis of focus groups with ward managers.

Running Title

Leadership, team efficacy and aggression

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Main File

Title

Team efficacy and leadership in managing aggressive situations in the general hospital setting. A qualitative descriptive analysis of focus groups with ward managers.

Abstract

Aims and objectives: This study explores the perception and issues regarding the ability of nursing teams to manage patient and visitor aggression in clinical practice, from ward managers' perspectives.

Background: Patient and visitor aggression causes substantial human suffering and financial damage in healthcare organizations. Nurse managers are key persons for developing their teams' efficacy in dealing with patient and visitor aggression. However, their perception of patient and visitor aggression in clinical practice has rarely been explored, and issues relating to team management in this context are underinvestigated.

Design: A secondary, qualitative thematic analysis of focus group interviews.

Methods: Five focus groups consisting of a total of 30 ward and deputy ward managers from five Swiss hospitals were interviewed with audio recording between December 2015 and January 2016.

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Since the recordings were rich in additional content exceeding the primary research question, a secondary analysis was conducted to answer the questions: (1) Which factors influence team efficacy in regard to patient and visitor aggression? (2) What are the implications for nurse leadership? The *Consolidated Criteria for Reporting Qualitative Research* were followed in the conduct and reporting of this study.

Results: Three themes emerged from our analysis: (1) contextual factors (organizational safety culture and collaboration), (2) influences from within the team (team culture, nursing aggression and general management principles) and (3) implications for nurse leadership.

Conclusions: Managing patient and visitor aggression is a challenge for nurse managers. A team's ability to prevent, de-escalate and debrief after PVA incidents is an important leadership task in which ward managers are neither supported in nor trained for within their organizations.

Relevance to clinical practice: Nurse managers in general hospitals require more support to enable their teams to cope effectively with patient and visitor aggression. Policy and guideline implementation need to be prioritized.

Keywords

Management; general hospital; staff safety; patient safety; qualitative research; thematic analysis

What does this paper contribute to the wider global clinical community?

- This paper shows that fostering team ability to prevent, de-escalate, and debrief after PVA incidents in healthcare is an important, complex, and challenging leadership task.
- This paper highlights that nurse managers in general hospitals may need support to enable their teams to cope more effectively with patient and visitor aggression.
- Training courses aimed at supporting nurse managers' needs should be developed.

Introduction

Physical or verbal aggression in healthcare settings may surface as 'horizontal violence' or 'internal violence' by colleagues, staff, or managers, or as 'external aggression' by persons from

outside the organization, such as patients or visitors (Magnavita & Heponiemi, 2011). Both internal and external violence cause considerable harm to individuals and organizations; however, this study focuses solely on external aggression. The current evidence on patient and visitor aggression (PVA) concerning interactions with staff underscores its damaging effects. Not only does PVA cause human suffering, including depression, burnout, or posttraumatic stress disorder (Lanctôt & Guay, 2014), it may turn staff away from their employer or even from the healthcare profession altogether (Estryn-Behar et al., 2008; Powell, Dawson, Topakas, Durose, & Fewtrell, 2014). PVA causes considerable harm and substantial financial burden for the system and for society. It aggravates staff shortages in healthcare due to loss of expertise and due to sick leave taken in the aftermath of PVA incidents (National Institute for Health and Care Excellence, 2015; NHS Security Management Service, 2010). Aggression makes working in healthcare less attractive and may prevent young people from considering or choosing a career in healthcare.

To reduce the number of PVA incidents in healthcare, it is vital to coordinate multidisciplinary action, to foster collaboration, and to develop strategies at the community/societal (macro), organizational (meso), and staff/team (micro) levels (Hahn, 2012; WorkSafe, 2017). At the macro-level, interventions at community and policy level, as well as engagement from professional associations, are important in establishing the legal frameworks that protect and define healthcare professionals' rights. These will also help to raise awareness for PVA within society at large.

Recommended strategies at the meso-level include having an official policy containing a clear statement against aggression in workplaces (Hahn, 2012; The Joint Commission, 2018; WorkSafe, 2017). Specifically, health organizations should have an official definition of PVA, and should provide and implement guidelines and strategies for its prevention and management. Every hospital should convene an inter-professional committee for establishing and updating policies to ensure health and safety for staff and patients alike. Experts should be officially appointed to provide necessary support to victims of PVA (Hahn, 2012; The Joint Commission, 2018; WorkSafe, 2017). Research clearly shows that a coordinated, participatory, and all-organizational approach to addressing PVA leads to a significant reduction in PVA incidents in terms of both frequency and severity (Magnavita, 2011).

With regard to the micro-level, staff training and teamwork are the most relevant strategies to prevent and manage PVA (Bowers, 2014). An evidence-based model from the mental health sector, the Safewards model, stresses that good team work with clear, structured ward routines, clean and tidy wards, and a shared ideology or direction cultivates low-aggression environments (Bowers, 2014). Training tailored to the needs of staff is important to ensure that they acquire

adequate skills and knowledge about prevention and management of aggression (Bowers, 2014; Hahn, 2012; WorkSafe, 2017).

Despite a wealth of recommendations on how to create low-aggression environments and an expanding scientific knowledge base, PVA incidence remains high (Spector, Zhou, & Che, 2014). One proposed explanation is that healthcare organizational cultures often accept PVA as part of the job (Wolf, Delao, & Perhats, 2014). Such cultures foster the underreporting of PVA (Hegney, Tuckett, Parker, & Eley, 2010; Lindy & Schaefer, 2010). Organizational policies and procedures may be available, but they lack implementation into clinical practice on the micro-level, particularly in the general hospital setting (Heckemann, Hahn, Halfens, Richter, & Schols, 2019; Hegney et al., 2010). Yet, as Bowers (2014) emphasises, staff have considerable power to prevent and reduce PVA. They can exert influence by modifying workflows, flow of information, and communication. If, on the other hand, these factors are neglected, aggressive patient behaviour can emerge as a consequence.

Background

Knowledge about the specific factors that trigger aggressive behaviour in patients is indispensable for staff working in close patient contact. The following specific patient-related factors make aggressive patient behaviour more likely: being 65 years of age and older; drug or alcohol abuse; cognitive deficits; psychiatric diagnoses; and states of emotional arousal (anxiety, stress and/or pain) (Hahn, 2012; Hahn, Müller, Needham, et al., 2010). While the patient-related factors are well known, the interactional perspective and the role of healthcare professionals' behaviour in triggering aggression is less frequently discussed. The *Cognitive Model of Patient Aggression Towards Health Care Staff* (Winstanley, 2005) adds this perspective. The model elucidates how a patient's failure or inability to attribute positive intent to intimate or painful care interventions or examinations can lead to arousal and trigger aggression (Winstanley, 2005). The model is particularly relevant for nurses (and nurse aides), because they often work in close physical proximity to patients, and spend more time in direct patient contact than any other healthcare professional. Nurses have therefore the highest risk of experiencing PVA and the most direct exposure to PVA (Edward, Ousey, Warelow, & Lui, 2014; The Health and Safety Executive, 2015). Importantly, in this role they also have the opportunity to prevent, de-escalate, and manage aggressive incidents.

Nurses need adequate skills and knowledge to prevent and manage PVA. Additionally, training tailored to the clinical speciality and the patient group treated is recommended for nursing staff and teams. However, the provision of training, particularly in the general hospital setting, is often poorly regulated, and quality assurance is lacking. To address this problem, the UK-based

Restraint Reduction Network (RRN) recently published a comprehensive compilation of training standards (Ridley & Leitch, 2019). The RRN aim to provide a national and international benchmark for training programmes aimed at reducing conflict in education, health, and social care settings. Moreover, strategic team training to improve knowledge and skills in managing PVA in teams in general hospital nursing is becoming increasingly available (e.g. *Management of Clinical Aggression-Rapid Emergency Department Intervention – MOCA-REDI*) (Gerdtz et al., 2013). MOCA-REDI is an evidence-based programme that considers the role of clinical leadership and that develops knowledge and skills using an interdisciplinary model. However, to achieve reduction of PVA incidents, any staff training must be embedded in a participatory program that implements organization-wide policies, creation of shared attitudes against PVA, and team-based response strategies (Magnavita, 2011).

Despite this evidence, training in the general hospital setting appears to be unspecific, as it has only been offered to individual members of staff (Heckemann et al., 2019). Individual staff training has been shown to increase individual staff members' confidence and their ability to manage PVA, although this knowledge has not in general been transferred successfully into the professional and inter-professional team (Heckemann, Breimaier, Halfens, Schols, & Hahn, 2016; Heckemann, Zeller, Hahn, Dassen, Schols & Halfens, 2015). However, the team is an important resource in the prevention, management and debriefing of PVA (Heckemann et al., 2016). Inter-professional team training approaches that provide each individual team member with the knowledge, skills and attitudes required to ensure effective team performance (Shuffler, DiazGranados, & Salas, 2011), should be offered to make the most of the resources within the team. Ward teams should be capable and confident in their ability to deal with PVA; they should display high team efficacy (Bandura, 2000; Gully, Incalcaterra, Joshi, & Beauien, 2002). A highly efficient team holds the shared belief that aggressive or threatening situations can be adequately assessed, de-escalated, solved, and debriefed within the team. By contrast, teams with low team efficacy would not share this belief (Bandura, 2000; Gully et al., 2002).

Ward managers are key persons for developing team efficacy in the management of PVA in regard to their team leadership behaviour. In particular, person-focused leadership has a positive influence on team learning behaviour (Koeslag-Kreunen, Piet Van den Bossche, Hoven, Van der Klink, & Gijsselaers, 2018). Moreover, ward managers who work clinically are in direct contact with nursing staff, in addition to carrying out their managerial functions. Therefore, they have unique insight into both the staff and managerial issues related to team management of PVA. However, their perception of PVA and the issues relating to team management of PVA in clinical practice has rarely been explored. This study aims to address this gap in knowledge by drawing on the unique insights

of ward managers working in the general hospital setting in Switzerland. The objective of this study is to derive recommendations for better management of PVA through leadership at both the ward (micro) and the organizational (meso) levels. The term 'team' was defined to comprise the nursing team on a ward (staff nurses, nurse assistants and the ward manager).

Research questions

This study investigates the following two questions from the ward managers' perspective:

1. Which factors influence team efficacy with regard to PVA?
2. What are the implications for nurse leadership?

Methods

Design

This study is an explorative secondary analysis of focus group interviews with ward managers. The interviews were originally generated to explore nurse managers' roles and attitudes in relation to PVA in the general hospital setting (Heckemann et al., 2017). Nevertheless, the focus group interviews enabled an in-depth discussion to occur, and a broad range of factors and issues that influence the nursing team ability to manage PVA were reflected upon. These reflections could not be included in the primary publication. (Heckemann et al., 2017), However, we believe that a secondary analysis of the rich data that had to be excluded from the primary analysis could be a valuable contribution to the currently scant evidence base on leadership and PVA in healthcare. We therefore undertook to a secondary analysis of the focus group transcripts.

Sample, sampling and setting

Switzerland has around 102 general hospitals (non-specialized hospitals) that provide care for a population of 8.4 million people. Approximately 60% of these hospitals are located in the German-speaking region of Switzerland (Bundesamt für Statistik, Sektionen Gesundheitsversorgung, Gesundheit der Bevölkerung, 2019). Taking the last author's professional network as a starting point, a convenience sample of directors of nursing from 15 general hospitals in the German-speaking region of Switzerland was invited in writing to participate in the study in October 2015. Five directors of nursing agreed to support the study. They distributed the invitation to participate to ward managers and deputy ward managers within their organizations. Ward managers from five hospitals participated in the focus group discussions. All hospitals participating in this study were general regional hospitals that typically provide a range of inpatient and outpatient services, treatments, and examinations in a variety of medical and surgical disciplines. The smallest hospital included in this

study had approximately 140 beds, three hospitals had between 200 to 250 beds, and the largest participating hospital had around 370 beds. The annual number of inpatient hospital care days ranged from approximately 52 to 500 for the smallest hospitals, and from 128 to 600 in the largest hospitals. One focus group interview was conducted in each hospital.

Data collection

All five focus group interviews were conducted and audio-recorded between December 2nd, 2015 and January 14th, 2016, in private meeting rooms at the respective hospital sites. The group sizes ranged from a minimum of four to a maximum of seven participants. The interviews were conducted in German, according to an interview guide (Heckemann et al., 2017). The interviews were conducted and moderated by a research associate (KP). KP is a qualified nurse with experience in clinical practice and as a nurse leader. KP is also a PhD candidate with ample experience in conducting focus groups in previous projects at Bern University of Applied Sciences.

Ethical considerations

The original study protocol was submitted for review to the local Swiss Ethics Commission in August 2015. It was confirmed that the study plan was exempt from a full ethical application, because the study was outside the scope of the Swiss Federal Act on Research involving Humans. The study was conducted in compliance with Swiss national legal and regulatory requirements. All participants gave informed written consent, including consent for a secondary analysis of the focus group data. Participants were given the option to revoke their consent to a secondary analysis at any time. No participant chose to revoke their consent. To ensure confidentiality, all personal information was anonymized in the audio transcripts, along with any other documentation. This study was conducted and reported in accordance with the *Consolidated Criteria for Reporting Qualitative Studies* (COREQ) (Tong, Sainsbury, & Craig, 2007) (see Supplementary File 1)

Data analysis

The audio recordings were transcribed in accordance with a transcription manual and subsequently analysed in a thematic analysis (Brown & Clarke, 2006). The analysis was guided by the process outlined by the *Qualitative Analysis Guide of Leuven* (QUAGOL) (Dierckx de Casterle, Gastmans, Bryon, & Denie, 2012). The QUAGOL framework describes a generic and systematic, yet flexible process for data analysis, which we adopted as outlined in Table 1.

The smallest unit of analysis was sentences containing at least a subject and a verb. These were coded as meaning units. When several sentences were present pertaining to one aspect, they were grouped together in a code and assigned to a category. The content of the meaning units was

condensed into descriptive memos and allocated to codes in our evolving coding scheme (see Table 1). Although Table 1 depicts a linear process, the actual data analysis was an iterative process, which commenced with a cycle of deductive analysis, and was followed by a further cycle of inductive analysis (Table 1). The data management and the analysis were conducted utilizing qualitative data analysis software (MAXQDA Version 2018, VERBI Gmbh, Berlin, Germany).

All authors were qualified nurses with experience in clinical practice and nurse leadership. BH and SH held a PhD in Nursing Science, FJST was a PhD candidate and SSD was completing her master's thesis at the time of the writing of this manuscript. While all authors contributed to the analysis, SSD & BH conducted the main coding.

INSERT TABLE 1 ABOUT HERE

Validity and Rigour

The primary criterion of validity in qualitative research consists of credibility, authenticity, criticality and integrity (Whittemore, Chase & Mandle, 2001). We ensured the study's credibility and authenticity by treating the language as a 'vehicle of communication', rather than an interpretive structure (Sandelowski, 2000). Interpreting the language at this quite superficial level meant that we stayed relatively close to the data, which was appropriate for our stated research aims and questions. This also increased the transparency of our interpretation of the data for our readers (Sandelowski, 2000). The inclusion of quotes from the transcripts strengthens the integrity of our analysis and ensures criticality (Whittemore, Chase & Mandle, 2001). Explicitness, vividness, creativity, thoroughness, congruence, and sensitivity were considered secondary criteria (Whittemore et al, 2001). We created an audit trail of our analysis of the transcripts in MAXQDA (VERBi 2018) and also logged our discussions onto spreadsheets (Lincoln & Guba, 1985) to ensure explicitness (Whittemore et al. 2001). Vividness entails descriptions "with artfulness, imagination, and clarity" (Whittemore et al. 2001, p.531). Our data analysis was both rigorous and artful. We allowed ourselves to 'creatively play' with the codes and their respective categories throughout the analysis until themes emerged that were clearly defined and demarcated. Thoroughness (Whittemore et al. 2001, p. 532) was ensured by choosing a method, thematic analysis, and following its processes to ensure no details were missed. Following this structured process of analysis also effected congruence (Dierckx de Casterle, et al., 2012). Finally, sensitivity was achieved by reporting the various perspectives that were voiced in the focus groups, since our participants worked in different departments and thus contributed to the focus group discussions drawing from a multitude of experiences of PVA.

Findings

Socio-demographics and experience with PVA

Five focus groups including 30 ward managers or deputy ward managers (male n = 6, female n = 24) working in different speciality wards were interviewed. All participants had experienced verbal aggression and/or physical aggression at some point in their career. However, the frequency of aggression that the managers encountered in their current positions differed substantially (see Table 2). The duration of the focus groups ranged from 66 to 98 minutes.

INSERT TABLE 2 ABOUT HERE

Thematic analysis

The (deputy) ward managers included in this study mostly worked at the team level; however, the three themes that emerged from this analysis pertained to the micro and meso levels. Two themes were related to Research Question 1 and described the factors influencing team efficacy regarding PVA. These themes were contextual factors (meso level), and influences from within the team (which straddle the micro and meso levels). The third theme pertained to Research Question 2 and elucidated implications for nurse leadership (it also straddled the micro- and meso levels). See Figure 1 for an overview of these findings.

INSERT FIGURE 1 ABOUT HERE

1: Contextual factors

The ability to prevent and manage PVA as a team is closely linked to the organizational safety culture, to the collaboration with physicians and with other departments or healthcare institutions, and to support from outside the organization (e.g. police). Overall, the ward managers reported that the contextual factors were often adverse to the effective management of aggressive behaviour.

a) Organizational safety culture

The ward managers reported that PVA was not a topic of importance in their respective organizations. The nurse managers' descriptions of the organizational safety cultures against PVA highlighted differences in the organizational approaches to PVA in terms of availability of training, availability and implementation of policies, guidelines and reporting procedures, as well as the overall attitude towards addressing PVA:

"I think the guidelines and the directives clearly reflect that the attitude [of our superiors] is similar to ours. That you have to record it [aggressive incidents], take it seriously and take action".
FG1, Participant 2.

Another participant states: *"[PVA] is not enough of a topic. [...] Me, in my new role. I have not been long in this role. I did not know about this protocol [for reporting PVA incidents] until now. [...], and I never noticed this protocol ever being completed in the Emergency Department. But [...] we are actually confronted [with PVA], I would say almost every single day, in whichever form that may be. [...] Em, but, em it is like too little, [PVA] is too little of a topic, in my area. [...] I think more measures have to be taken. That would make sense."* FG1, Participant 1.

Some nurse managers questioned the usefulness of reporting procedures, since in their experience, incident reports were not followed up with actions or feedback from higher

management levels. *"I am just wondering what happens to these protocols. Whether there is an annual evaluation. [...] Because then I would also feel taken seriously in my work. [...]"* FG 1, Participant 5.

Training courses, when available, did not always specifically address the training needs of the staff.

b) Collaboration

The nurse managers highlighted the importance of collaboration in the prevention and management of PVA with other organizations (e.g. psychiatric hospitals), and also within the organization and the department itself. Successful collaboration ensured quality of patient care, while lack of collaboration led to a heightened risk for PVA, and thus endangered staff and patient safety.

The transfer of patients from one ward or setting to another was challenging. The managers described, for example, that psychiatric hospitals refused to accept patients that required a minimum level of general nursing care or somatic-medical treatment.

"[...] the external transfers. If somehow nothing works anymore, [...] it is like the doctor's, my, social services' hands are tied. [...] And I do not find that satisfying. I do not understand then, why somehow a psychiatric hospital cannot manage to take someone who simply needs basic care. That they cannot just deliver regular basic nursing care there and medical monitoring. I don't get it." FG 1, Participant 5

Transfers between wards within the organization threatened the continuity of treatment, since PVA prevention regimes such as delirium prevention were not necessarily continued as per protocol after the transfer took place.

"[...] You [on the intensive care unit], somehow plan the treatment or something like that and then they [the patients] come back to the [regular care] ward. And then [...] it's: Ah, no, we do not do this now [...] And then the drugs are completely different again than you might have prescribed. And then from going well, the whole game starts all over again or. Or can start from the beginning. [...] If everybody would pull together, yes." FG 5, Participant 8.

Some participants described in-house security services as being useful in the management of aggressive incidents; other participants regarded them less positively. The police assisted when situations could no longer be handled by hospital staff, especially on accident and emergency wards and in ambulance services.

Within departments, shared decision-making on measures to reduce PVA between physicians and nurses was a crucial factor in whether PVA escalated or could be contained. Additionally, professional experience was important, because [...] *"when you have only new junior physicians [on the ward], and there may be also a new consultant and a psychiatrist, who is also not really familiar [with the routines]. And then it is much more difficult than if there is a team joining the patient or the situation which has experienced this a few times and knows how to prescribe, knows how [and] where [...] to get help now"*. FG 5, Participant 7. However, the collaboration between medical and nursing staff could be challenging. While some nurse managers from A&E departments and intensive care wards described consensual teamwork and the use of coordinated strategies, other nurse managers experienced a lack of a coherent strategy and support.

"Well, we also have a lot of patients with addictions, and with some we made a contract: 'If that happens again [PVA], then goodbye', and nobody sticks to it [...] that makes you look so stupid. You try to assert yourself and then another doctor comes and says, 'But no, we cannot throw him out now'. But we had an agreement. It's not like you made it, [...], because we just thought it was fun, [we did it] because it there is a background [story to it]." FG 1, Participant 4.

In particular, when physicians had spent relatively little time in direct patient contact, they underestimated the seriousness of aggressive situations. They did not take nurses' concerns seriously, and often refused to attend. In some instances, members of the medical team declined responsibility, which led to the unacceptable and stressful postponement of treatment decisions. *"I also think, uh, if you reach your limit, when from the nursing side, like simply everything was done or forwarded [to the physicians], there is no progress. Like, for instance, as you said, during the night. [...] where actually, when you report that it [a situation] is no longer acceptable, um, safety is no longer guaranteed, the patient endangers themselves and others, um, [there are] the other patients, who are not being cared for during this time. And then there is no progress from the medical side. I think that's certainly the most stressful thing about it."* FG 5, Participant 7.

2: Influences on team efficacy from within the team

This theme describes factors within the nursing team which influence their ability to prevent, manage, and debrief after a PVA incident. Three subthemes emerged from the analysis: (1) team culture, (2) nursing aggression, and (3) general management principles. The nurse managers' descriptions highlight the importance of balancing the three factors with care, as they can work towards not only achieving a low-aggression environment, but also towards decreasing PVA.

a) Team culture

The managers described PVA as being unacceptable, yet it was a part of their daily work. Although the team could be a resource for support in difficult situations, it also had the potential to aggravate conflict. This occurred especially with repeated or exaggerated narration after an incident, which prevented the team from moving on: “[...] sometimes [the story] is being somewhat drawn out a bit. And then told to another [nurse], and then told to the evening shift. [...] you always have to be careful that you do not become negative towards the patient, because you actually go in [to see the patient] with this attitude, ah him, he said this, or did that.” FG 3, Participant 5.

In general, teams tried to be self-sufficient and manage incidents and post-incident phases without reporting them to higher management levels, or without receiving formal debriefing. PVA incidents were often discussed informally, although there might have been a need for a more formal debriefing. “At a meeting [with superiors] you might talk about it [an incident], but otherwise you actually deal with it yourself, within the department. Just with the patient and with us as line managers. If there isn't actually something like an accident, that is, an incident leading to an injury, then you very rarely report it to your superiors.” FG 1, Participant 3.

The ward managers reported that after incidents that they had regarded as concluded, staff were still talking about them weeks or months later. Only at this point did the full extent of its impact on staff become apparent. Furthermore, the team members, in general, had very high expectations of themselves and aspired to “make everything possible”. This meant that the teams often sought to adapt their workflows to patients’ or visitors’ expectations, as well as to the needs of other professional groups.

b) Nursing aggression

The ward managers described aggressive behaviour of nurses against patients. Three types of behaviour were identifiable that had an influence on the occurrence and/or management of PVA.

The first type occurred in relation to patient interventions or observations which staff perceived as necessary, but inflicted pain on the patient. Observation practices, such as the use of pain stimuli to determine the level of consciousness in a patient as per the Glasgow Coma Scale (GCS), could also be painful and perceived as aggression.

“And then GCS monitoring is indicated, which has to be done, and a patient experienced that as physical violence. [...], if you do the GCS monitoring correctly, you set pain stimuli. This pain stimulus [...] really hurts. This patient really felt that way. She was well, just in this psychiatric state, just like in a stupor, just really averted, not responding, even to pain stimuli. This indicated for us that she is very somnolent, she does not react, has a GCS [score] of 8, you have to almost intubate.

What do you do in this situation? And it was actually the psychiatric problem. As it turned out, [...], she did notice the pain stimuli consciously. And she reported us for assault [...]." FG 5, Participant 4.

The interventions also included restraining measures, such as the fixation of the hands of intubated patients, the fixation of the sheets, or abdominal belts or mittens for restless patients. At the time of the interviews, restraint measures were no longer legal on wards that provided non-emergency care (e.g. medical or surgical wards), according to newly introduced Swiss adult protection legislation. Therefore, on all wards that provided non-emergency care, attempts were made to remove all invasive catheters and tubes, and to focus on mobilizing restless patients. However, ICU ward managers reported that their staff had become somewhat accustomed and desensitised to such measures, as in the following example: *"Well, yes, the intensive care nurses are perhaps already a little used to it. That's, how shall I put it, there's not so much hesitation. So, you know, in this situation you just have to do it and then you do it. [...] You go into these situations knowing that you have to use your physical strength."* FG 5, Participant 4. ICU ward managers stressed the importance of ongoing evaluation to determine whether painful assessments or interventions were appropriate in a given situation.

The second type of aggression consisted of passive-aggressive behaviours. The ward managers recounted that staff experienced aggressive patient behaviour, particularly verbal aggression, as hurtful and unappreciative. While this type of aggression triggers aggressive retaliation impulses in nurses, they cannot give in to these impulses, as they have to act within their professional role. When maintaining emotional control turned into a major challenge, nurses resorted to passive-aggressive strategies, such as not answering a patient call or turning off the call without attending to the patient. At times, sedative medication was given to patients not only to calm them down, but also to calm down the whole situation: *"[...] Then I better give him [the patient] a little more Haldol [neuroleptic medication] or whatever, um, so I don't become aggressive myself, right?"* FG 4, Participant 2.

The third type of nursing aggression described was conditioned on the individual's propensity towards aggression. The personal capacity of nursing staff for maintaining professional composure when faced with aggressive behaviour varied considerably, due to the individual's mood and the workload. Time of day was also mentioned as an influencing factor, as especially at night, PVA was more difficult to cope with. However, this ability to retain composure was also determined by the individual's inherent propensity or trigger threshold towards reacting aggressively, which could in turn rouse or worsen patient or visitor aggression. Managing staff with an inherent disposition to react aggressively towards patients was a challenge for managers.

"Um, I have a person on our team who has a history. Just problems with aggression. There were always situations in which it would escalate again. Or situations when we realized, now, um, there's really something personal in it. Now the aggression comes [...] from within the team." FG 5, Participant 4.

c) General PVA management principles

The ward managers pointed out that PVA always contains some element of unpredictability, and not all aggressive incidents can be prevented.

"It really varies [whether situations escalate], as Ms C said, [...], but it may be that there are many people in the room [to try and slightly intimidate the patient] and then you realize, that is now too much. Sometimes everybody needs to be sent out of the room, it really varies. Or maybe, you realize that the aggression [is directed towards] one particular person in the room. We had [this situation], it was a sitter, he [the patient] had a strongly negative reaction against the sitter [...]" FG, Participant 1

They also described general management principles such as ensuring adequate staffing levels to enable communication and individual care planning and principles of good practice that facilitated the prevention and management of PVA. These included clear staff communication and the setting of explicit ground rules for patient and visitors. Staff also require spatial awareness to maintain a safe physical distance to patients. Furthermore, patient care should be adapted to patients' needs, and this should be discussed within the multidisciplinary team early in the treatment episode. The patient's biography should also be considered, because it provides important and early indications of potential problems (e.g. addiction, mental illness, etc.).

3: Implications for leadership

From the ward manager perspective, contextual factors should be addressed within the team. The ward managers mostly described how they led and managed their teams when dealing with aggression. Addressing the contextual factors appeared to be the most challenging aspect for the ward managers. Their main strategy in the management of PVA appeared to be to practice good communication and to remain accessible to all parties involved (staff, patients and visitors). This functioned not only as a means of prevention of PVA, but it also was important after the occurrence of aggressive incidents. Communication was essential to them to determine the cause of aggressive patient or visitor behaviour, and to find a mutually acceptable solution to any conflict.

"I, as a leader, then enter into a conversation with this person [who has been aggressive]. Let's hear what their issues are and why it has come to this, to this aggression." FG 1, Participant 3.

Furthermore, the ward managers endorsed good practice, such as official reporting of incidents by actively promoting the completion of reporting forms. Within the team, they tried to raise awareness of PVA, for example at team meetings, and they sought to improve practice through critical reflection after incidents.

Finally, support of staff was important. The managers stressed that planned and prescribed care measures only had to be carried out so long as the safety of the staff member was assured. As PVA often occurred outside of office hours, especially in the evenings and at night, the ward managers discussed with the team members how they should manage these situations. They assisted their teams in the setting of clear boundaries and encouraged them to refuse to tolerate unacceptable behaviour. *"So, on my ward, I just think, like [about this] particular night, when [...] the elderly nurse said [to a patient]: "[...] now that's enough. That's not how you talk to me." And I believe my own [the ward manager's] attitude is also important in this case, [because] the others [the team members] noticed this and then I said, yes, there is a limit. And, if it [the patient's behaviour] crosses your limit, then you may well say, "Now it is enough. And I don't have to accept that [this kind of behaviour] from you." [...]" FG 3, Participant 2.*

To prevent challenging care situations from escalating, the ward managers helped to plan concrete measures (e.g. frequent personnel turnover with demanding patients), or they took turns and stayed with these patients themselves. Additionally, they communicated with staff to detect whether staff were able to cope with ongoing challenging care situations, and they adjusted the staff plan if necessary. The protection of less experienced staff members, such as students or interns, was important to the participants.

Ward managers had, however, to operate within an organizational context that often did not provide sufficient support to them. The ward managers described what they would need to improve the prevention and management of PVA. Their needs were mainly linked to a lack of organizational support. They wished that senior management would recognize the challenge that PVA presented to nursing teams. They also conveyed their need for guidance as to how to proceed in specific situations, for example whether or not staff were obliged to prevent a patient from leaving the intensive care unit if there was a high risk of injury. Ward managers also desired clear feedback from their superiors regarding the official reporting of PVA incidents. Finally, they identified a need for adequate aggression prevention and management training for staff, particularly those working close to the patients such as sitters or nursing aides. Additionally, they advocated to increase professional support (e.g. psychologists) for staff affected by PVA.

Discussion

This secondary analysis of interviews with ward managers revealed factors that influenced the ability of nursing teams to prevent and manage PVA. It also revealed implications for leadership from the perspective of nurse managers. Our analysis underscores the magnitude of the challenge of effective prevention and management of PVA. This is especially difficult because the web of workflows and inter-professional and intra-professional team relationships in general hospitals are complex. The nurse managers linked the influencing factors to both the micro and meso levels, which corroborates previous findings regarding the factors that influence the occurrence of PVA in healthcare (Hahn, 2012).

Contextual factors

The nurse managers described a number of contextual factors that influence the nursing team's ability to prevent and manage PVA. Contextual factors are an important part of the organizational safety culture (Partridge & Affleck, 2017; Sato, Wakabayashi, Kiyoshi-Teo, & Fukahori, 2013; Wolf, Perhats, & Delao, 2015). They include an overall tangible, supportive attitude towards the prevention and management of PVA within healthcare organizations (Bowers, 2014; Hahn, 2012; WorkSafe, 2017). This attitude needs to be mirrored in clinical practice, through the implementation of measures against PVA at the meso-level, such as inter-professional guidelines, policies, and official position statements. Additionally, adequate environmental measures (e.g. adequate lighting, controlled entrance areas) need to be provided. Further important measures would be the establishment of an inter-professional committee for policies on health and safety, expert counsellors to provide support to victims of PVA, the allocation of financial resources to curb aggression, as well as provision of staff training (Hahn, 2012; The Joint Commission, 2018; WorkSafe, 2017).

In our study, the nurse managers described lack of support as the principal contextual factor. They perceived a lack of implementation or availability of organizational measures and guidelines in the prevention and management of PVA, as well as a lack of official reporting procedures to help to curb aggression. Some ward managers described that in-house security services were available; however, they were uncertain as to whether or not this was helpful. A possible explanation may be the lack of commonly agreed industry standards regarding the training of security staff, which means that some staff may lack adequate training in PVA prevention and management. Nurse managers' reporting of lack of support is congruent with research that highlights inconsistencies in how measures against PVA are employed in the general hospital setting (Heckemann et al., 2019; Hegney et al., 2010). Overall, the lack of security measures reveals a lack of commitment at the

organizational management level to create a culture of safety. Moreover, our findings may be interpreted as being reflective of a persistent attitude of acceptance towards patient and visitor aggression in the general hospital setting. This interpretation also is corroborated by international literature (Wolf et al., 2014).

The ward managers also reported a lack of collaboration with other departments and individual members of the multidisciplinary team, mainly physicians. The reasons for this lack of collaboration were varied. Patient transfers to another ward or institutions threaten the continuity of care. Physicians could be inexperienced in dealing with aggression. They were also not present on the ward very much and not in contact with patients for an adequate amount of time; therefore, they did not take nurses' reports seriously enough, and thus failed to act on them. Inter-professional collaboration has been identified as one of the factors that increases both staff and patient safety (The Joint Commission, 2012). However, due to traditionally established power imbalances and the relative status of physicians and nurses (Eriksson & Müllern, 2017; House & Havens, 2017), achieving successful collaboration between these professions remains a challenge. The lack of effective collaboration between nurses and medical physicians affects all areas of their work, including improvements to working conditions, patient care and patient safety, and especially the prevention and management of aggression. In addition, factors from within the nursing team emerged as obstacles to successful collaboration with physicians, mainly a team culture of 'making do' and of managing situations themselves so as to be 'self-sufficient'. This attitude led to problems in dealing with aggression. Nursing teams were described as being very accommodating to needs of patients and other healthcare professionals. However, at the same time, they experienced a lack of inter-professional support, if and when they required help. This may be reflective of the previously discussed traditional roles and discrepancies between the nursing and medical profession (House & Havens, 2017). Reflection and communication within the inter-professional team regarding the nursing team's capabilities, competencies and boundaries of responsibility in dealing with aggression emerged as an important leadership task that was not being adequately addressed.

Influences on team efficacy from within the team

Nursing teams also endeavoured to be self-sufficient in debriefing after PVA incidents, which was mainly done through discussion and story-telling within the team. The sharing of a PVA experience with team colleagues can have a therapeutic effect. Bowers (2014) described this practical support as an important form of venting of emotions 'off stage'. However, our analysis showed that repeated sharing of PVA incident stories can also have undesirable effects. First, repeated reliving of the PVA incident amplified its significance to a level that could be

disproportionate to the actual PVA incident. Second, repeated reliving of the incident can adversely influence staff attitudes towards a patient or visitor who had been involved in a PVA incident, particularly if they take the form of gossiping (e.g. disparaging talk about the patient or visitor involved in the incident, which can become engrained as a group feeling amongst staff) (Michelson & Mouly, 2000).

Our findings highlight the importance of nurse leadership to guide and facilitate the narrative debriefing between the team members, which also prevents the build-up of a negative attitude or a disproportionate amplification of a PVA incident.

Moreover, our analysis unexpectedly revealed the importance of nursing aggression. To understand this phenomenon, it is helpful to illuminate three aspects of nursing aggression: nursing care interventions which could be perceived as aggressive acts, passive-aggressive behaviours, and staff members' propensity to aggressive behaviours. Nursing aggression can aggravate interactions with patients and/or visitors, leading to a possible escalation of PVA.

Winstanley (2005) described how care interventions such as painful investigations or treatments can trigger aggressive behaviour of patients. While certainly not all painful or intrusive procedures can be avoided in the provision of high-standard patient care, our study participants reported a partial desensitization among nursing teams in relation to the pain inflicted through routine procedures. This highlights the need for frequent reflection on clinical practice and for a conscious balancing of clinical benefit versus the pain inflicted. This will help to ensure that invasive and painful measures are only taken when strictly necessary. It is the responsibility of ward managers to sensitize their teams to the problems posed by these practices, and to encourage staff to reflect on and evaluate such measures from the patients' perspective (Winstanley, 2005). Reflective practice with regard to invasive measures, in particular to physical restraint, is gaining increased attention. Recently published guidelines and standards aim to reduce restraint practices by promoting alternative approaches, such as de-escalation (Lach, Leach, & Butcher, 2016; Registered Nurses' Association of Ontario, 2012; Ridley & Leitch, 2019). Under the Swiss adult protection law, restraint measures are strictly regulated (Die Bundesversammlung der Schweizerischen Eidgenossenschaft, 2018). However, the nurse managers in this study described a lack of organizational support, which hampers de-escalation according to best-practice guidelines on restraint reduction.

Research regarding retaliation or passive aggressive nurse behaviours is currently scant (Peter & Hahn, 2014). This is probably due the sensitivity of the topic, which challenges nurses to examine how their own roles and behaviours could contribute to the occurrence of PVA.

In general, the issue of nursing aggression challenges all professionals who are concerned with the reduction of aggression in healthcare to discuss whether the term PVA is conducive to problem-solving, as it implies that patients and visitors are the perpetrators, and nurses are the victims. Alternative terms that have been used in the literature, such as challenging, difficult, transgressive or disruptive patient behaviours, also assign victim and perpetrator roles. A more appropriate and neutral term may be 'conflict containment', which is used in the Safewards model (Bowers, 2014). It signifies that all actors in the relationship have a role to play in reducing conflict potential.

The ward managers included in our study attempted to reduce the emotional load of PVA. They tried to mitigate passive aggressive behaviours by removing staff from aggressive situations. They coached members of staff who themselves showed a propensity towards aggression, and also communicated with patients and visitors to de-escalate conflict situations. However, it is unclear whether the nurse managers had the requisite skills and training to provide effective coaching or counselling when helping staff with a propensity for aggression. Even staff without a propensity for behaving aggressively found PVA to be an emotional challenge. While this is a normal human reaction, it must also be addressed to minimize passive-aggressive and retaliation behaviours. This appears to be an aspect that is not always sufficiently addressed in aggression management courses (Heckemann et al., 2016).

The ward managers describe adequate staffing as an important measure in the prevention of PVA, because it enables better communication and individual care planning. The additional cost of adequate staffing would at least partially be offset by a reduction of PVA-related follow-up costs. These follow-up costs arise from staff fluctuation and absence caused by PVA incidents, as described by the NHS Security Management Service (2010).

Implications for leadership

Our research shows that PVA is a complex challenge for nurse leaders, as the contextual factors are difficult to address. Ward managers should be enabled to strengthen the resources available within their teams to achieve higher team efficacy. Building strong and efficient teams and establishing a positive team culture is a leadership challenge for ward managers. They exert direct control over whether the teams are a source of support, or whether they aggravate aggression. Importantly, ward managers function as role model (Bowers, 2014). They set an example as to how to react adequately to PVA and how to prevent aggressive behaviour on the part of the nursing team.

The ward managers included in our study expressed strong motivation to address PVA, but lacked the organizational support to do so. A recent meta-analysis (Koeslag-Kreunen et al., 2018) revealed that nurse managers can foster team learning through certain forms of leadership. However, our analysis suggests that ward managers do not currently receive sufficient training and education to fulfil this role. Adequate training courses aimed at nurse managers are currently lacking for the general hospital setting. Current research findings from the general hospital setting (Heckemann et al., 2019) and models from the mental health setting (Bowers, 2014) may, however, serve as a basis to develop training tailored to the needs of healthcare managers.

Strengths and limitations

This study provides novel insights into leadership issues and team dynamics in relation to PVA based on a secondary analysis of focus groups with ward managers. Although the focus group transcripts are rich in content, a further exploration of essential leadership skills in a broader audience is needed, as we cannot be certain that we achieved data saturation. Also, we did not obtain participant feedback on our analysis. Moreover, we may have introduced selection bias by recruiting a convenience sample of (deputy) ward managers. It is, therefore, possible that our participants were more knowledgeable and reflective about PVA than a randomly recruited sample of ward managers would have been. However, in view of the aims of the study, a group of participants with a keen interest and knowledge about PVA was preferable, as it enabled rich in-depth discussion and an exploration of factors that determine team efficacy.

Furthermore, we employed a tentative literature-based definition (Bandura, 1997, 2000; Gully et al., 2002) that described team efficacy as the ability to prevent, manage, and debrief after a PVA incident. However, the complexity of the subject of aggression requires a look at both team dynamics and the relationship with patients and visitors. This should be further explored in future research on team efficacy in relation to PVA.

Conclusion

This study highlighted the complexity of managing patient and visitor aggression from the ward manager perspective. Aggressive behaviour on the part of nurses themselves emerged as a topic that warrants further research. The results also showed that developing the ability of teams to prevent, de-escalate, and debrief after PVA incidents is an important leadership task for which ward managers are insufficiently prepared, both due to lack of training and due to lack of organizational support.

Relevance to clinical practice

This study highlights that nurse managers in general hospitals require support to enable their teams to better deal with PVA. This is of particular importance as the implementation of policy and practice guidelines into clinical practice requires an all-organizational commitment.

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Table 1: Coding plan and coding process

<i>Cycle</i>	<i>Coding Phase</i>	<i>Coders</i>
Preparation of the coding process	(reading of focus groups, narrative interview report, development of initial coding scheme	SSD, BH
Coding cycle 1	Trial and adaptation of coding scheme	SSD, BH
Coding cycle 2	Coding of all interviews, condensing meaning of coded units in memos	SSG, BH
Coding cycle 3	Linking all relevant text units to codes	SSD, BH
Coding cycle 4	Review coding	SSD, BH
Coding cycle 5	Description of concepts	SSD, BH
Cycle 6	Identifying the story line, description of essential findings	SSD, BH

Table 2:: Focus groups: number of participants, speciality and experience of patient and visitor aggression

Focus Groups (n)	Participants as per clinical specialty (n)	Frequency (experience of PVA)			
		Daily	Weekly	Monthly	Rarely
1 (n=7) (6 f)	Accident and emergency (A&E) (n=1), Ambulance services (n=1)	x			
	General medicine and palliative care (n=1)		x		
	General surgery (n=1), General Medicine (n=2)			x	
	Surgical ward, short-stay unit (n=1)	*			
2 (n=4)	A&E incl. ambulance services (n=1)	x			
	Private ward of mixed disciplines (n=1),	*			
	Nephrology and dialysis (n=1)			x	
	Obstetrics, gynaecology and maternity (n=1)				x
3 (n=6)	General surgery (n=1), Private ward, mixed disciplines (n=1)	*			
	A&E (n=1)	x			
	Intensive care (n=1), General medicine (n=1)		x		
	Private ward (gynaecology and general surgery) (n=1)			x	
4 (n=5)	Intermediate Care (n=1), General medicine (n=1), Interdisciplinary ward (including oncology) (n=1)	*			
	Intensive care (n=1)	x			
	Ward with surgical and medical patients (n=1)				x
5 (n=8)	A&E (n=1), Intensive care (n=1)	x			
	Medical intermediate care (n=1), General medicine (n=1)		x		
	Obstetrics, gynaecology & maternity (n=1)	No information			

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