

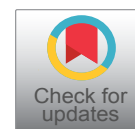


ORIGINAL ARTICLE

Managing a Stressful Work Environment through Improved Teamwork - A Qualitative Content Analysis of Nurses Working Environment within Emergency Care

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Abstract

Aim: The aim of this study was to describe nurses' experiences of their working environment in emergency departments at a general hospital in Manila, Philippines.

Background: The working environment within emergency care is complex and unpredictable and may influence patient safety. Nurses are challenged by increased patient flow, staff shortages and heavy workload.

Methods: This study used a qualitative content analysis with an inductive approach based on semi-structured interviews with nine nurses at emergency departments.

Results: One category, improved teamwork toward a healthy working environment, which included two subcategories, barriers to providing a high quality of care and managing a stressful work environment, describe nurses' experiences with their work environment at emergency departments in the Philippines.

Conclusion: Workload manifests through a high patient ratio and patient safety-affected prioritizations of patients, which is why basic nursing is limited. Therefore, improved teamwork built upon person-centered care is needed to increase the high quality of care as well as a healthy working environment.

Keywords

Emergency department, Patient safety, Person-centered care, Qualitative content analysis, Teamwork, Workload

[1]. Nurses working in EDs face challenges such as increased patient flow and shortages of nurses, which results in a heavy workload. To prepare for unexpected situations, nurses need to prioritize patients with varying illnesses [2]. According to Lin, et al. [3], nurses' working environments in EDs are described based on the Western part of the world. The current study aims to broaden knowledge regarding Filipino nurses' experiences of their working environment in EDs [4,5] by adding an Asian perspective, specifically, Filipino nurses' experiences.

Background

The department of health [6], defines emergency care as acute illness or injury in which rapid medical care is needed, often due to a lack of resources in primary care. Emergency departments (EDs) provide immediate care staffed by physicians, nurses and assistant nurses divided into different specialties, such as medicine, orthopedics and surgery [7]. However, overcrowded EDs result in decreased quality of care as well as increased costs [2,6] due to diversities in the way EDs are organized and structured (staff, size, hours of operation, treatments). Furthermore, emergency rooms (ERs) operate around the clock and are often patients' first contact with healthcare in cooperation with other professional authorities, such as ambulances, police, fire departments and alarm operations [8]. Common illnesses include infections, heart attacks, strokes and acute complications of chronic diseases. Financial

Introduction

Emergency departments (EDs) are described as stressful and unpredictable care units with a risk of medical errors due to poor working conditions



Citation: Horn D, Lindström M, Rosengren K (2018) Managing a Stressful Work Environment through Improved Teamwork - A Qualitative Content Analysis of Nurses Working Environment within Emergency Care. Int Arch Nurs Health Care 4:109. doi.org/10.23937/2469-5823/15100109

Accepted: November 24, 2018; **Published:** November 26, 2018

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barriers among patients delay treatments when life-threatening illness occurs [7]. Given the constantly increasing need for emergency care, overcrowded EDs use prioritization, often known as triage, to assess and refer patients to the correct level of care in a timely manner [2,9]. Emergency triage process is commonly performed by nurses through dialogue, examinations and monitoring conducted on a limited timetable [10,11]. Nurses use a variety of knowledge (medicine, nursing) as well as organized teamwork to facilitate high-quality care [12]. Therefore, communication within the team is vital to work towards mutual goals, solve problems and manage complex healthcare. Simulation increases confidence with teamwork, which decreases occupational stress due to the use of competences as well as increased satisfaction among patients [13].

A moderate level of stress is positive because it keeps staff motivated and alert at work [14]. This six factors influence: Stress and anxiety, relationships with colleagues, cooperation and communication skills, motivation with work, work tasks and professional development, and a supportive working environment [15]. Watson [16] nursing theory emphasizes the interplay between the environment and actors (nurse-patient relationship) based on a holistic and humanistic approach. The theory considers how interaction and relationship are established by sharing knowledge, acceptance and trust through communication and collaboration facilitated by nursing leadership. However, to support, improve and protect the physical, socio-cultural and spiritual environment, nurses' own well-being is important when providing a high quality of care for others [16]. Regardless of the workplace, nurses have an obligation to promote health, prevent illness and alleviate suffering to restore health [17]. In the context of person-centered care (PCC) based on a holistic and individual approach, patient resources are at the frontline for satisfying medical, existential and emotional needs by creating a caring environment focusing on patients' resources. PCC is more than just a way of working; it is a philosophy. Patients are equal partners in planning, development and assessment, ensuring that care is personalized and built upon a genuine interest in a holistic view of other people's worlds, decisions and priorities [18]. A healthy working environment grounded in mutual goals is needed to facilitate PCC and vice versa [19]. Family-centered care (FCC) is one way to develop collaboration among patients, families and health professionals by sharing information to increase understanding and participation in decision-making as well as care planning by facilitating trust and mutual goals [20].

In summary, a shortage of nurses combined with increased patient flow in EDs presents a threat to patient safety due to increased complications and illness during hospitalization. Despite poor working conditions

(high workload, shortage of staff), nurses are willing to remain in nursing [21]. Given limited knowledge regarding Asian nurses' working environment, the aim of this study is to describe nurses' experiences of their working environment in emergency departments at a general hospital in Manila, Philippines. The following issues are addressed:

- To describe and analyze how Filipino nurses experience patient safety in EDs;
- To describe and analyze how Filipino nurses experience teamwork in EDs;
- To describe and analyze how Filipino nurses experience their workload in EDs.

Methods

Setting

This study took place at a tertiary state-owned hospital operated in Manila, Philippines, one of the oldest and largest hospitals funded by the government and established in 1907 by the US government. This funding enables a large capacity of specialists within different areas, such as trauma, surgery and pediatrics. The ED in this hospital is one of the busiest in the Philippines due to the intake of patients (2000-3000 patients/day) and the level of severe diseases. The hospital has a capacity of 1500 beds with a combination of public (1000 beds) and private (500 beds) care. It includes 4000 employees (more than 1000 nurses) divided into 15 departments, such as emergency, medicine, surgery and pediatrics [22].

Design

A qualitative method was used together with an inductive approach to understand nurses' voices, views and thoughts regarding the working environment in the Philippines. Content analysis identifies the use of several concepts related to the research procedures to achieve trustworthiness: credibility, dependability and transferability [23-25]. A qualitative research design that relies on trustworthiness, transparency, verification, and reflexivity and that is "information-driven" can be helpful when developing insightful and artful interpretations within nursing [25].

Data collection

A small convenience sample based on qualitative methods was used [23-25]. The inclusion criteria for participation were registered nurses over the age of 18, nursing experience at the emergency department > 1 year at Philippine General Hospital, and the ability to understand and speak English. The embassy of the Philippines helped the authors reach out to hospital directors in Manila by providing e-mail addresses before they travel to Manila for eight weeks. Thereafter, information was sent by e-mail to the director of

Table 1: Examples of analysis process.

Meaning unit	Condensed meaning unit	Code	Subcategory	Category
You cannot have continuous care of a patient at the same time because there are so many patients, so many medications, you have to be alert at the same time. So for one patient, you have to prepare like 15 medications for this patient, and then sometimes you really have to be alert because there is a high risk of you making a medication error if you are stressed out.	You cannot take care of many patients at the same time. You have to be alert because there is a high risk of committing medication errors if you are stressed.	High workload Responsibility	Managing a stressful work environment	Barriers to providing a high quality of care
They will tell you sometimes the patient is okay, that the patient has room air only, not oxygen support, but actually the patient already has coded in the ER. They will conceal it. Sometimes they endorse patients and will not tell you they have already coded twice, so once they come here, you are not prepared. So now you have to be prepared because of the high chance of coding in your area.	Sometimes they endorse patients and don't tell you the patient has already coded twice. Now you have to be prepared because of the high chance of coding in your area.	Impact of communication Unprepared	Teamwork's impact in managing a complex caring environment	

hospitals in the Philippines, and the first hospital that answered the author's request for participation with regard to the study aim was chosen. The deputy of nursing at this hospital sent an inquiry regarding the background and the study's aim, and nurses who were interested in participating attended an informational meeting at the ED conducted by two of the authors (DH and ML). The first nine nurses who contacted two of the authors (DH and ML) were included. Ethical guidelines for human and social research were considered throughout the study [26]. Data were collected in March 2018. All participants (n = 9) were informed about the study's aim and procedures, and confidentiality was assured. The interviews started with background questions, including age, education and experiences in healthcare/ED. Data collection focused on five perspectives: working environment, workload, teamwork, patient safety and future aspects. The interviews started with the question, "When thinking about nursing at the ED, what are your thoughts about your work?" Based on the answers, related questions were asked. Examples of situations such as positive and negative aspects of nursing at EDs were explored, and clarifications and further elaborations were made. If needed, questions were added or changes were made to the order of questions based on the specific answers from nurses. Follow-up questions were asked, such as, "You say ... can you tell us more? Can you give an example of your statement?" The interviews ended by asking, "Is there anything else you would like to add?" In this way, the participants had the ability to express their experience in their own words. The interviews were conducted individually by two of the authors (DH and ML) at the ED and lasted between 32 and 57 minutes. All interviews were recorded and transcribed verbatim. All participants were registered nurses (n = 9), three males and six women aged 26-58 (median = 38) with four years of education, 3-33 years of experience within nursing and 3-27 years of experience within emergency care.

Data analysis

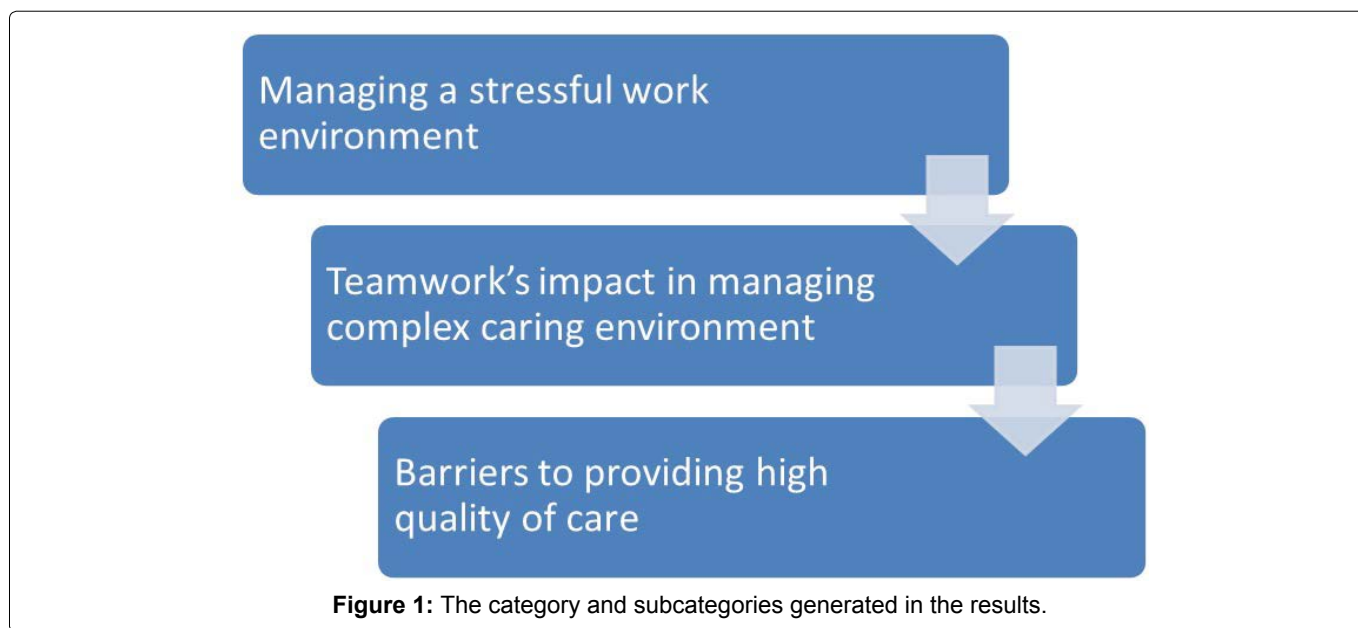
The interviews were analyzed using manifest qualitative content analysis [23,24] to interpret the meaning of the content of the data to address trustworthiness [25] with examples drawn from the nurses' experiences with nursing at EDs. The written words were the basis for the analysis that was performed in the following steps (Table 1 and Table 2): 1. Transcripts were read and re-read to obtain an understanding of and familiarity with the text; 2. Meaning units (words, sentences or paragraphs) corresponding to the content areas were selected using an inductive approach concerning (a) Workload and (b) Responsibility; 3. Each meaning unit was condensed into a description of its content and labelled with one of 24 codes; 4. Subcategories were identified and grouped in relation to codes; and 5. One category was identified (improved teamwork toward a healthy working environment), which included two subcategories (barriers to providing a high quality of care and managing a stressful work environment).

Ethical considerations

Ethical approval and permission for the study were obtained from the director of the hospital as well as the deputy of the nursing department at Philippine General Hospital. No ethical approval was needed due to Swedish rules and guidelines regarding a student's thesis and/or quality improvement that have no negative effects for the employed participants [26,27]. However, ethical guidelines for human and social research were followed throughout the study [26]. Respect for the individual nurses was a main concern during the study. All nurses were informed about voluntary participation and their right to withdraw at any time and that their answers would be kept confidential. The results are described in categories without identification. Respect for the informants' integrity and autonomy was thereby shown [26].

Table 2: Overview of theme, categories and codes.

Theme	Category	Code
Barriers to providing a high quality of care	Managing a stressful work environment	High workload Prioritizing Interruption Unprepared Multitasking Lack of time Lack of resources Demanding work Observant Neglecting Guilt Lack of control Emotional exhaustion
	Teamwork's impact in managing complex caring environment	Responsibility Impact of communication Conflicts Cooperation Professionalism Ineffectiveness Differences Needs Situation awareness Support Expectations



Result

Data analysis generated one category, improved teamwork toward a healthy working environment, which included two subcategories, barriers to providing a high quality of care and managing a stressful work environment, which describes nurses' experiences with their work environment at emergency departments in Manila. Categories are presented in [Figure 1](#).

Improved teamwork toward a healthy working environment

The category of improved teamwork toward a healthy working environment is described as organizational support to enhance preparedness. Influencing factors in managing complex caring situations were acknowledged

due to competencies that were facilitated by collaboration through teamwork. Relationships among staff members as well as patients and relatives were emphasized as vital for high-quality care. According to lack of resources, such as time with respect to the shortage of staff members, results in a high patient ratio in a stressful work environment with high demands. Consequences such as low quality of care due to prioritizing acute and/or severe care require limitations to create a caring environment. Therefore, some staff travel abroad for a better working environment. In addition, nurses' emotional reactions, such as numbness due to not doing enough, negatively influence patient safety. The participants described emotional exhaustion, which made it difficult to work with empathy for patients and relatives. However, patient recovery and feedback from patients regarding the content of nursing facilitate a

sense of achievement, a significant factor with regard to work satisfaction and occupational health.

Barriers to providing a high quality of care

The subcategory of barriers to providing a high quality of care is described as a high workload, lack of resources and lack of time due to nursing within a hierarchical system. Nurses experience obstacles such as a high workload due to a shortage of nurses, which results in simultaneous work that affects patient safety. The participants summarized their experiences working in EDs into the word 'toxic', which was mentioned several times to express the stressful and demanding working environment. They highlighted the high nurse-patient ratio, at least 15-30 patients per nurse, which resulted in limited time for them to build trustworthy relationships, a basic and essential aspect of nursing. Time restraints resulted in medication errors and non-compliance with hygiene routines due to infection control. Other aspects regarding patient safety were described as events of falling or accidents that they considered preventive nursing work that they did not have time to perform due to their high workload, which were described by the participants as stressful due to difficulties in catching up with numerous duties within each eight-hour shift. The nurses stressed that it was not appropriate to delegate unfinished tasks to the next shift because the next nurses on duty also had a high workload. Moreover, to manage the stressful working environment, it is necessary to constantly prioritize patients based on their conditions, which results in neglecting less critical patients. Patient safety is influenced when cardiac arrest is prioritized and medications to other patients are put on hold while rescuing a coding patient. Therefore, the nurses highlighted that their emotional reactions were affected, such as feeling numbness about not doing enough, which created low morale with feelings of exhaustion and guilt. The participants highlighted a lack of control because prioritizing resulted in decreased work satisfaction; therefore, they looked for other possibilities, such as working abroad, due to limited working conditions. Moreover, working with emergency care was described as emotionally overwhelming but simultaneously incredibly rewarding and meaningful. The nurses highlighted that kindness and appreciation from patients and relatives compensated for the negative aspects of nursing and were the reasons they continued working within the EDs stressful working environment. The nurses argued that they chose to stay due to their hope for organizational changes and improvements as well as their pride in their expert knowledge, which allowed them to provide the best possible care by being innovative and well skilled. One nurse described this as follows:

"The science behind it, taking care of people, caring for others. And then when they see you and they are treated they come to you: 'Thank you for taking care of

me!' Those are priceless moments that you can only get from being a nurse. You take care of others, and they appreciate it. That's the reward that cannot be bought". (N4)

Given the limited resources, the nurses stressed that they depended on the presence of relatives to perform basic care, such as personal hygiene, dressing and administering oral medications to their loved ones. This voluntary resource became visible when patients lacked relatives, which increased the nurses' workload. However, the participants noted that relatives are not adequately educated to perform basic nursing tasks, which affects patient safety and may do more harm than good. Therefore, the participants stated that they tried to adapt and delegate to staff with limited experience by being innovative in nursing. However, a shortage of staff members results in occupational stress, which facilitates a hierarchical system regarding nursing competence (low) versus physicians (high) due to the organization of acute illness or injury. Nurses experienced the work environment as a war zone without control due to the high inflow of patients in relation to existing resources, which left some patients lying on the floor or sharing beds. They noted a high burden (15-30 patients/nurse) due to the complexity of severely ill patients, as described as follows:

"We had 36 patients and 2 nurses that shift... We had a lot of intubated and critically ill patients. One patient had traumatic brain injury, and there was a poor prognosis for that patient, so we were not able to give full care to that patient because we needed to attend to other patients as well. We don't have time to focus on dying patients but rather on how to save patients' lives". (N8)

The nurses explained that they are forced to be creative in using resources in the best possible way, such as using voluntary resources or buying materials out of pocket. In addition, non-compliance with aseptic conditions was described because of the high workload and stressful work environment. For example, for patients who arrive at the emergency room, the primary concern is to treat and stabilize the patients, so aseptic procedures are neglected due to high workload.

Managing a stressful work environment

The subcategory of managing a stressful work environment is described as increased collaboration, communication and competence utilization. The nurses stated that teamwork is crucial for effective and safe care because emergency care treats critically ill patients. With regard to teamwork, collaboration is described as a key to decreasing nurses' isolation in critical caring situations through shared responsibility. One nurse described the consequences of non-efficient teamwork as follows:

"You are burned out; you know the feeling when you lack the energy to perform something, you don't

have the enthusiasm anymore, you don't have the motivation. You are just thinking, when is my day off. You are losing enthusiasm and compassion, and you are easily irritated". (N6)

Collaboration with other departments at the hospital is perceived as inadequate and results in increased frustration due to a lack of honest information when patients are moved between care units. The participants stated that communication failures affected their feelings of being unprepared, which influenced the quality of care. Moreover, communication errors (lack of dialogue, feedback) hinder the EDs potential due to negative flow in the care system, which is why conflict management is needed. Therefore, interacting with staff from different departments has room for improvement. The nurses stressed that improved teamwork facilitates the use of knowledge and competence in the best possible way due to the complexity of emergency care. Supportive colleagues contribute to a high quality of care within a complex caring environment through common and shared goals during every work shift (i.e., responsiveness and trust between professional roles). The improved work climate as well as improved patient outcomes were discussed as follows:

"Also positive is being with coworkers. We find support from each other, and we have a good relationship, and I think that's important because the hospital is so stressful. So you find happiness when your colleagues smile at you; you smile back! That's fresh air! It makes the work easier". (N4)

The participants stated that support and collaboration facilitate a healthy working environment with equally distributed amounts of work among staff members. They noted that if everyone in the team supports each other during the shift (day/evening/night), the quality of care and work satisfaction are improved.

"I have no trouble with the workload, toxicity, or getting tired of the job as long as I see my coworkers also doing the same kind of job. Seeing my colleagues helping out patients, doing a good job, gives me less stress". (N2)

Moreover, nurses highlighted the significance of satisfying nurse-patient relationships based on medical, nursing and emotional needs, which facilitate a high quality of care. The participants stressed that a holistic way of working, including continuous updates regarding healthcare status at EDs, creates a trusting relationship with patients and relatives.

"That's is the most important task during my shift, to have good communication with the relatives. I approach them properly and talk to them, explain to them what I expect from them. It's important especially if the patient is not that critical to explain that I'm not going to spend that much time with them. That's the secret: To level with them so that they can understand, and then they

really understand because they understand that the critically ill patients need more of my time". (N2)

According to the nurses, high-quality care relies on the competence within the team, especially during acute life-threatening situations in the care unit. The EDs complex care environment is described as a place to learn through bedside experiences and spending time caring for patients together with the team rather than paperwork. This facilitates their development as excellent ED nurses.

"When I got here, I experienced a lot of multiple codes, multiple massive traumas. I feel excited every time I get to have that kind of experience. I learn a lot of cases because here you accept all and you see all kinds of patients. We get to rotate so I get to expand my knowledge". (N5)

Discussion

The aim of this study was to describe nurses' experiences of their working environment in emergency departments at a general hospital in Manila, Philippines. The results highlight that working in emergency care is both stimulating and demanding and is challenging due to a stressful working environment with a high patient ratio and high workload within a hierarchical system. The ED nurses' working environment resulted in high levels of stress, which are described by Yuwanich [28] as work-related stressors. These stressors led to non-holistic care, misinformation and delayed nursing assessments. Therefore, it is crucial for nurses within EDs to collaborate with all involved actors (staff, patient, relatives) to use all available resources in the best possible way to decrease their workload as much as possible [12]. The combination of a high workload and time limitations creates stress among nurses in emergency care, which is why medication errors appeared due to multitasking [29]. Therefore, to improve patient safety as well as Filipino nurses' occupational health [15,30,31], a managerial perspective is needed. First-line managers' (FLM) support [32] at the ward level is one step to involve staff in organizational changes, such as increasing the use of teamwork based on nurses' competence to ensure a high quality of care [21]. FLM may be patient-facing professionals as well as recruit and supervise nursing staff, i.e. facilitators to provide the best ED care by support nurses, patients and their family when needed or requested with innovative ideas that will spark change for the better within the organization. This is highly requested when nurses dealing with patients who are sedated or otherwise decisionally incapacitated. Moreover, guidelines for communication minimize errors and help to find solutions, achieve consensus and increase compliance with routines strengthen nurse's preparedness within ED care. FLM who facilitate teamwork by using all available knowledge create synergy effects (1 + 1 = 3 or more) through improved communication strategies as well as communication skills among staff

members [12,32]. Extended knowledge regarding emergency care within the team together with clear medical directives at work are valuable tools for patient safety [31]. Workplaces that offer a healthy working environment that includes time for reflection at work facilitate a high quality of care. Therefore, nursing leadership [32] is important to create healthcare organizations that facilitate work satisfaction and patient safety. Moreover, clear clinical guidelines [8] facilitate the implementation of evidence-based knowledge of what to do (coding) as well as how and why (collaboration in team within and outside EDs) to perform high-quality emergency care [1]. The current study describes a demanding caring environment that negatively influences Philippine nurses' occupational health by increasing stress levels with negative emotions due to complex patient cases. The nurses' emotional reactions demonstrate their awareness that the high workload affects the quality of care and highlights improved collaboration to handle matters due of patient safety [14,31]. Nurses are responsible for creating a healthy environment (in the physical, social mental dimensions) grounded in a caring relationship for improved recovery and a high quality of care for patients [16,33]. Moreover, research [34] highlight that stress nor burnout among nursing staff were related to patients' levels of satisfaction. However, stress as over-engagement were associated with emotional exhaustion and cynicism (dis-engagement), which are symptoms of burnout, also showed in current study. Therefore, teamwork as well as supportive managerial perspective is needed to improve nurses working environment to prevent burnout (dis-engagement) among nurses. Moreover, research [30] shows that nurses who use positive coping strategies have decreased stress reactions, which leads to positive attitudes that maintain their nursing ambition to provide quality care. This is in line with the aim of nursing: To promote health, prevent illness and alleviate suffering to restore health [17]. The patients' appreciation and gratitude was an important aspect of the nurses' working environment that generated positive emotions. Despite the high workload, nurses described meaningfulness in helping other people, which influenced their willingness to stay within the profession. This situation had a major impact on the way nurses managed their working day.

Another issue related to improving nurses' working environment is that healthcare units are well equipped with material for nursing. Limited resources could be managed by increased donations instead of using nurses' pocket money. Clear and available information inside and outside hospital buildings as well as the use of governmental information channels could improve nurses' caring environment through committed volunteers who assist patients with different tasks to improve the quality of care, especially for patients with no relatives who can perform caring activities such as food, hygiene and administering oral medicines. Experiences

from non-profit organizations demonstrate that it is important for volunteers to enjoy what they are doing. To recruit capable and reliable volunteers, healthcare organizations need to have informative websites with multimedia components, encourage volunteers to recruit their friends, deliver unique community/hospital presentations, seek interns with volunteer hour requirements, and focus on in-person interviews [35]. Research shows that it is possible to use volunteers in palliative care; however, training regarding policies and procedures, volunteer relationships, and rural-specific designs impacts the feasibility of volunteers [36]. However, volunteers (medical students) at the hospital had unclear tasks which results in lack of support why clear instruction is needed to improve use of volunteers in Philippines. Nurses at EDs could benefit from volunteers within the team, especially when patients lack relatives.

According to Fry, et al. [37], relatives' role and participation in patient care is described as a vital resource in family-centered care. Limited resources require nurses to be innovative to improve the quality of care. Therefore, teamwork is essential to use all available resources in the best possible way due to the shortage of staff as well as the high workload. Constantly prioritizing critically ill patients increases the possibility that non-urgent patients will be neglected, which creates feelings of guilt about not giving all patients the care they need. Similar findings are shown in McConnell's, et al. [19] literature review, which notes that medical tasks limit a holistic approach and that nurses need knowledge regarding the philosophy behind PCC. By considering personhood beyond the organizational perspective, medical as well as holistic nursing is included through a focus on patients' lived experiences (expert) as well as nurses' knowledge of nursing. A care plan built on a holistic perspective is in accordance with Watson's [16] caring theory, which is significant for relationships within a particular context/environment. Nurses who promote and accept expressions of emotion within a professional nursing relationship develop trust and confidence towards patients. This harmonizes with McCabe's [38] view that the relationship between staff and patients is central to achieving patient satisfaction. Therefore, teamwork within a healthy working environment facilitates caring relationships with patients and relatives, which are essential to achieving mutual goals using PCC. Increasing patient and relative participation in basic care in line with PCC results in the effective use of resources (lived experiences-professional knowledge) through a partnership in healthcare [39,40]. However, PCC requires a less hierarchical organization built upon collaboration in a team with the possibility of telling life stories/narratives regarding everyday life situations from experts (patients/relatives) to experts (nurses).

The nurses in the current study expressed discontent regarding collaboration with other units at the hospital, which is in line with Muntlin's, et al. [41] study that

suggested that poor collaboration exacerbated the workload for nurses when receiving incoming patients. A lack of collaboration due to poor communication between care units, such as radiology and the laboratory, delays ED care and created additional work, which affects patient safety. Therefore, teamwork relationships between care units improves understanding of each other's roles and leads to a high quality of care [41]. To develop teamwork, it is important to take action at the managerial level to manage territorial ways of thinking.

Limitations

A limitation of this study is that it was conducted at one general hospital in one country, the Philippines. The small sample limits the ability to generalize to other settings. However, the trustworthiness of the results was ensured through a scientific systematic analysis using manifest qualitative content analysis, a well-documented methodology [23,24]. The study's validity, however, might be debated due to the data collection procedure, which involved a limited number of interviews (n = 9). The variations in the nurses' experiences of EDs and their English skills could also be a limitation. Moreover, the Philippines differs in its social structure, education and healthcare systems, which must be taken into consideration with regard to the transferability of the current study. Further studies are needed to develop knowledge regarding nurses' working environment. For example, quantitative research that includes a larger number of informants could contribute to increased knowledge regarding nurses' working environment.

Conclusion

This study has given a voice to Philippine nurses' experiences within emergency care. Findings including work-related factors such as an extensive workload were manifested through the high patient ratio, lack of staff and time restraints. The high workload resulted in prioritizations of patients' needs for limited basic nursing, which resulted in limitations in promoting health and preventing illness and suffering. Furthermore, a lack of equipment increases nurses' workload, which is why innovative and creative nursing is needed. Improvements are necessary with regard to the way EDs are organized through teamwork and the use of volunteers. Emotional exhaustion occurred as a consequence of the overwhelming work environment; however, nurses expressed work satisfaction due to rewarding feedback from patients and support from colleagues. The work environment influences nurses' occupational health, patient safety and quality of care. Therefore, improvements in the nurse-patient ratio are needed. Moreover, an unpleasant work environment constitutes a threat to achieving a good nurse-patient relationships. Implementing PCC could be a tool to promote evidence-based care and improve the quality of care, both locally and

globally. To provide a healthy working environment at EDs, first-line managers are the key to organizational change through quality improvements such as clear guidelines regarding routines for ED healthcare as well as staffing (competencies) to implement PCC in the team. However, there is limited knowledge regarding nurses' work environment in the Philippines, and further research is needed for nursing development using PCC to improve patient safety in EDs.

Ethical Approval

Ethical approval was not required for this study.

Contributions

Study design: DH, ML, KR; Data collection DH, ML; Data analysis DH, ML, KR; Manuscript preparation; KR.

Sources of Funding

The authors received no financial support for this research for authorship and/or publication of this article.

Acknowledgements

We thank the managers and nurses at the Philippine General Hospital who participated in the study and the University of Gothenburg Centre for Person-centered Care (GPCC), Sahlgrenska Academy, University of Gothenburg, Sweden.

Conflicts of Interest

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

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