Professional resilience among nurses working in an overcrowded emergency department in Taiwan

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ABSTRACT

Purpose: Professional resilience has become increasingly important for nurses in adverse work environments to reduce the negative results and increase the positive outcomes of stress. This study aimed to explore and understand the experiences of resilience among nurses in an overcrowded emergency department (ED) and increase knowledge about what nurses identified as protective factors, which may be useful for future planning.
Methods: A construction-grounded theory (CGT) approach was adopted. Purposive sampling and snowball technique were employed to recruit 13 participants, which proved sufficient to achieve theoretical saturation. In-depth interviews were conducted and audiotaped.
Results: Doubting work value and maintaining optimism were the 2 main themes in the core category of seeing and taking work difficulty and responsibility. Nurses described how their passion for their profession gradually diminished, but they assessed the situation and took responsibility for their jobs.
Conclusion: This study found that nurses retain their compassion, which sustains them in their work. The issue of ED overcrowding led to pessimism among nurses. However, work rewards encouraged nurses to adopt a more proactive attitude toward work-related adversity.

1. Introduction and background

When emergency department (ED) overcrowding becomes unavoidable, registered nurses (RN) confront a great amount of stress, such as limited care time for patients, heavy workloads, and psychosocial issues [1–3]. These negative stress outcomes significantly impact the wellbeing of RNs and are a major patient safety concern associated with poor patient outcomes [4,5]. During ED overcrowding, positive coping strategies may not be enough to reduce the negative effects of stress from a hazardous work environment. Professional resilience becomes increasingly important for nurses to deal with adverse work situations. Work adversity compels nurses to reduce the negative outcomes and increase the positive outcomes of stress. Understanding how RNs work in an overcrowded ED is meaningful [6,7].

From the perspective of symbolic interactionism [8], resilience is the result of an individual positively interacting with and adjusting to an adverse environment. Resilience can also be thought of as the ability to build personal strengths from personal and professional experiences. Connor and Davidson [9] defined resilience as "personal qualities that enable one to thrive in the face of adversity" (p. 76). Pangallo [10] further defined resilience as "effectively negotiating and adapting to a significant stress or trauma" (p. 2). The latter definition emphasizes the positive result of the interaction between an individual and his/her work environment. These definitions suggest that a resilient individual can learn from adversity, resulting in personal or professional growth [11]. Therefore, resilience refers to an individual's recovery from a challenge as a "positive adaptation of adversity" (p. 8) [12] and resilience becomes a motivational factor to achieve welfare, growth, and even self-actualization [13].

In an original perspective, Rutter [14] proposed that resilience

refers to "protective factors which modify, ameliorate, or alter a person's response to some environmental hazard that predisposes to a maladaptive outcome" (p. 316). Resilience has since been related to internal and external protective factors - resources, attributes, and skills – that minimize the debilitating effects of stress [15]. Perseverance and uneasy compromise are commonly perceived as important protective factors for a positive outcome of stress [16,17]. Other internal protective factors include self-efficacy [18], psychological empowerment [19], and hope and optimism [20]. As an external protective factor, social support was significant for nurses' resilience [21]. Resilience therefore requires personal fortitude and outer furtherance to allow an individual to recover from or adjust to adversity.

The issue of ED overcrowding has been described as a "crisis" in Taiwan. In 2016, 7.7 million visits to the emergency room were reported in a population of 23 million, at huge cost to government [22]. However, far less is known about resilience in the nursing profession, specifically in the ED, and even less is known about the role of protective factors for RNs confronting ED overcrowding. Developing a resilient work environment is seen as a way to reduce negative results and increase positive outcomes of work stress in health care professionals. Despite the ED's challenging work environment, insufficient attention had been paid in the literature to the topic of resiliency in ED nurses, especially during ED overcrowding. Qualitative exploration of resilience has the potential to provide valuable insights into RNs' perspectives in constantly overcrowded EDs. It can also reveal the meaning associated with the experiences of resilience [23]. Having a better understanding of resilience could promote insight into how ED RNs tolerate their difficult work. Furthermore, the RNs may develop coping strategies for successfully dealing with work tension to help them stay in their field.

This study aimed to (1) explore and understand resilience in nurses who work in overcrowded EDs and (2) increase knowledge about what nurses identify as protective factors, which may be employed in future planning.

2. Methods

2.1. Design

A construction-grounded theory (CGT) approach guided the study's methodology [24]. The CGT approach emphasizes the distinction between reality and truth, and the research outcomes are the result of interpretation. The theoretical concepts of a constructivist approach serve as interpretive frameworks and offer an abstract understanding rather than a theory for explanation and prediction. Knowledge is created and constructed during the research process. CGT therefore is appropriate in substantive areas such as ED overcrowding as this approach allows the exploration of the resiliency of ED RNs in a challenging work environment and an abstract understanding that is relevant to the reality of the participants.

2.2. Setting and participants

The study was conducted at a tertiary hospital in Taiwan with over three thousand ward beds and one hundred eighty observation beds for ED. The setting was chosen as it represents a phenomenon in a natural setting, that is, an overcrowded ED. The participating ED provided care to more than two million clients annually. The ideal nurse/patient ratio was one to six or eight. The study setting also provided an environment for researchers to investigate participants' professional resilience.

Purposive sampling was employed to recruit participants to enhance understandings of individual nurses' experiences of professional resilience. Permission for recruitment was obtained from the authorities at the organization. Study information and invitations to participate were provided to all potential participants at a ward meeting. A snowball technique, which is an effective way of enlisting the involvement of potential participants, was utilized to appeal to participants interested in contributing their views on dealing with an overcrowded ED work environment. The inclusion criteria were: (1) worked as a full-time ED nurse, (2) willing to participate in an interview, and (c) consented to having their responses audiotaped. Full-time RNs normally work a certain hours per month.

2.3. Data collection

The study purpose was explained and the participants gave informed consent. Individual in-depth interviews were conducted to secure rich data. Thirteen participants were sufficient to achieve theoretical saturation and the process of recruitment was discontinued at that point. Participants were interviewed onsite at a quiet and private location in the hospital. The interviews opened with the questions: "Could you please share your experiences of difficulties when facing the situation of ED crowding" and "How were you able to resolve these difficulties?" The participants effectively led the direction of the interviews, and further questioning was based on their responses and on an analysis of previous interviews. Each interview lasted 30–45 min. Data were collected from June to August 2016 by the principal researcher. Each interview was audiotaped and transcribed verbatim into a readable format. The tapes and transcripts provided an opportunity to frequently interact with the data.

2.4. Data analysis

The audio recording was transcribed immediately following each interview. The transcripts were read carefully to obtain a general concept of the interview. Data were analyzed using the constant comparative method to establish theoretically grounded categories. A set of coding steps was implemented as initial, focused, and theoretical coding [24]. Initial coding was performed by reading the transcripts using line-by-line coding for refocusing in later interviews. The coding also helped to complete the fit and relevance of data analysis. Focused coding made the most analytic sense in terms of categorizing the data for subsequent follow-up interviews. Several conceptual categories derived from focused coding were used for theoretical sampling. The questions in the interview guide were modified for a follow-up interview to clarify the emerging conceptual categories. Theoretical saturation was achieved after 13 interviews.

Theoretical coding was conducted to group subcategories into related categories and analyze their relationships. These categories were generated through provisional and conditional relationships. A central category represented the RNs' experience with resilience when they confronted ED overcrowding. The core category was abstracted to interpret the main phenomena through a process of conceptualization as generalizability was achieved.

2.5. Trustworthiness

Utilizing Charmaz's criteria [24], we evaluated the quality of the study's credibility, originality, resonance, and usefulness. Credibility was achieved by obtaining rich data from a single qualified principal researcher to ensure the consistency and quality of the interview data. A detailed written transcript, encouragement of participants to share their perspectives, and an identified major category by an experienced researcher in the field were the indicators of credible study results and process [25]. Originality was reached through the researcher's reflection and the literature to explore whether a new concept had been generated [26]. Achieving credibility and originality advanced the resonance and usefulness of the study results. Resonance was obtained by asking another researcher to read the report from the perspective of their own experiences, presenting findings using direct quotes, and providing rich descriptive data [27]. An interpretation of the study findings on resilience among RNs facing ED overcrowding contributed

Table 1
Participants biographical data. (Pseudonymous names used)

		ED work experience	Age	Marital status	Educational level
1.	Hsu	2	23	Single	Bachelor
2.	Lai	2.5	25	Single	Bachelor
3.	Lee	5	32	Single	Bachelor
4.	Chang	4	26	Single	Bachelor
5.	Chen	4	26	Single	Bachelor
6.	Xiao	3	25	Single	Bachelor
7.	Luo	17	38	Married	Bachelor
8.	He	4	27	Single	Bachelor
9.	Hsieh	5	28	Single	Bachelor
10.	You	6	30	Single	Bachelor
11.	Zhong	2	24	Single	Bachelor
12.	Mei	10	39	Married	Bachelor
13.	Huang	5	31	Married	Bachelor

to the criterion of usefulness [28]. The study process was therefore considered rigorous.

2.6. Ethical considerations

This study received ethical approval from the institutional review board of the participating hospital (102-3923B). The participants voluntarily contributed their views on their resiliency when facing ED overcrowding. They were informed that they could withdraw from the study at any time. Participant anonymity was maintained.

3. Results

The participants' demographic characteristics are displayed in Table 1. All participants were females in their early 20s or 30s, holding a bachelor degree. Their ED work experience ranged from two to seventeen years. Most participants were single. Data identified two categories and four subcategories: (1) tolerating physical overload, (2) having psychosocial worries, (3) relying on protective aspects, and (4) reaching self-expectations. Two categories were comprised of doubting work value and maintaining optimism. The RNs reported that their professional passion gradually diminished, but they understood the situation and took responsibility for their work.

3.1. Subcategory one: tolerating physical overload (TPO)

Growing Workload. RNs frequently encounter ED overflow and a growing workload dealing with an unlimited number of patients. Patients streamed into the ED but could not be moved to an appropriate area for further treatment. Large numbers of patients who remained in the ED with a specific number of RNs caused a growing workload. There were limited resources to reduce the number of patients or request more RNs. No relevant approaches to managing ED overcrowding were provided by the hospital administration or even the government health department responsible for health care. The participants had massive workloads with inadequate support, and the administration established work protocols concerning patient safety. Adjusting work protocols was a positive step but did not simplify the treatment process. Instead of streamlining the work process, the protocols were varied and contained miscellaneous items that resulted in RN Chen's saying: "*RNs feeling like machines, not professionals*". The work protocols therefore multiplied the RNs' workload. As the result of an increasing workload caused by too many patients in the ED, the participants' tolerated physical burdens.

RN Zhong: The observation room and therapeutic areas of the ED were filled with patients, and the antechamber and hallway were also occupied. The ED beds ran out and then the patients sat in wheelchairs or even in ambulance stretchers. I was surrounded by patients; patients were even placed very close behind me. I was even hit by a wheelchair when I made a turn.

Inadequate Resources. A fixed amount of medical equipment was provided for an uncontrolled number of ED patients, leading to an insufficient supply of resources. The participants contended with insufficient equipment that made care tougher and more burdensome. Less medical equipment resulted in a larger case workload. Due to ED overcrowding, treatment priorities had to be reorganized but it took time to reach an ideal scenario to meet patient needs. Nevertheless, this triage system frequently failed. Patients and their families went to the ED with the expectation that medical supplies and proper care would be provided. The actual situation was far from their expectations and requirements. Life-support equipment could not be delivered to a critical patient because of blocked access and a shortage of medical equipment. The patients and their families were stressed, leading to a tense relationship between the health care providers and the patients and their families. For certain health care professions, limited equipment and space and unlimited numbers of patients made treatment even more difficult. A lack of equipment affected the participants physically and psychosocially.

RN Lee: When I feel busy in my work that means there are too many ED patients. ED patients who come early may be placed in the hallway or other places because the medical equipment needed to be released to other patients. Patients and their families feel unhappy being moved around. It is painful for me as I need to spend my time moving patients around and face their unhappy reactions.

When the participants were burdened with insufficient supplies of equipment, it was difficult for them to believe that the patient safety policies were being taken seriously. ED overcrowding was not an occasional problem, but occurred frequently.

RN You: The policy of patient safety is not taken seriously. For example, patients can only lie on the ambulance stretcher, which is unstable, and patients cannot make any movements. It is dangerous...

3.2. Subcategory two: having psychosocial worries

Having psychosocial worries consisted of reduced treatment time, patient safety concerns, and strained relationships with patients and family.

Reduced Treatment Time. The subthemes of reduced treatment time and patient safety concerns were interrelated and caused by too many patients in the ED. Unrestricted numbers of patients were admitted to the ED, and the RNs were unable to provide adequate care. ED access was blocked, challenging the RNs' abilities to work effectively. Patients received insufficient treatment time, which was relevant to the issues of quality care and patient safety. ED care did not satisfy the needs of the patients and their families. RNs emphasized that the work was seen as endless and regretted their inability to offer quality care. Inadequate treatment time left the participants feeling distressed emotionally and psychologically. RN Hsu emphasized that the work was seen as endless:

RN Hsu: You [RNs] are supposed to take good care of patients. When there are too many patients with an emergency and critical status at a time, I feel I don't have enough time to manage that situation. Meanwhile, other patients and family also require you [RN] to be available at all times and continually urge you. The prescriptions from physicians are like snowflakes.

Reduced treatment time could also lead to possible omissions or mistakes during busy periods. Nonstop work meant that the participants had too many patients on their hands at a time, which could more easily cause the RNs to commit a breach of duty. This caused the participants psychological distress at work and even off duty.

RN Hsu: I was still feeling like I was at work when I was off duty and

tried to recall any omission I may have made during my shift. I would regret it if any careless action was made. But I did not know how to do it better because there were too many patients in the ED….

Patient Safety Concerns. The participants' increased workloads caused a decrease in treatment time, leading to issues pertaining to quality care and patient safety. Quality care was positively correlated to patient safety. These concerns arose from the organizational system, but the participants and patients were burdened with them as the result of ED over-admission. The participants were responsible for patient safety if any work omission occurred. They asked that policies be made from the bottom up instead of via the hierarchical power structure. Problems would be solved if the proper decisions were made at the right time and place. When they were concerned about patient safety, the participants experienced psychological stress, leading to doubting work value. ED policies did not reflect reality.

RN Luo: More and more patients need care, but you [RN] can not clearly describe what they need to know. If you cannot meet their original needs, they (patients) will bother you repeatedly and you [RN] will be busier at your work.

Strained Relationships with Patients and Family. Fewer resources and reduced treatment time resulted in displeasure among both ED patients and their families. Patients and their families came to the ED seeking relief. The interactions participants had with patients and their families were strained if the patients felt dissatisfied with the care they received. All parties were in a high-stress environment and arguments arose. An undesirable relationship developed between the participants and their patients, leading to the participants' psychosocial stress and hesitance at work. On one hand, more interactions with patients and their families led to more opportunities for negative accusations. On the other hand, the participants also received positive feedback from patients and their families. As RN Luo stated, the study participants knew the causes and effects of too many patients in the ED. However, they were powerless to manage both ED overcrowding and the ratio of patients to RNs. As a result, interactions with patients and their families became delicate. The level of doubting work value intensified.

RN Luo: We know that patients and their families are anxious, worried, and even angry. They are angry about the care received. When their needs are not met, they think you [RN] have not done enough. The quality of care is affected, especially by too many patients in the ED.

The negative effects of too many patients due to ED overcrowding caused the participants to question their work value. Having a positive attitude about work helped manage the doubting work value of the ED RNs. The theme, maintaining optimism, consisted of relying on protective aspects and achieving self-expectations.

3.3. Subcategory three: relying on protective aspects

The subcategory of relying on protective aspects (RPA) was related to the subcategory of tolerating physical overload (TPO). When RPA was greater than TPO, the participants had a positive attitude about work. RPA consisted of cooperating closely with colleagues, adjusting priorities, and implementing temporary policies.

Cooperating with Colleagues. There was no institutional solution for an overcrowded ED. The participants could only rely on assistance from their colleagues. They exercised flexibility, changing their own priorities to help teammates as necessary. Support from outside the ED came intermittently or not at all. An experienced teammate therefore was extremely important, effectively halving the workload. Assistance from colleagues was necessary, and these interactions led to a feeling of camaraderie. Friendships were fostered by the difficult situations all faced together. Through the work partnership, participants realized

they were not alone and were supported by their colleagues. This support helped them remain in the field and alleviated the tension from work overload. Understand the difficulty involved with each task led to an appreciation of nursing value. Participants noted, however, that this required staff who could work independently, so a well-trained nursing partner was vital.

RN Lai: Your work partner is very important, you both need to reach and maintain a secret agreement. It would be awfully busy if your teammate was a new nursing staffer who had little or no work experience in the ED. Your work would not only include taking care of patients, but also covering what the new staff had done, because they were not ready to work in the ED.

Adjusting Work Priorities. The participants adjusted their work priorities depending on the work environment, which was related to the number of patients and their needs. More experienced ED participants had greater ability to adapt to the changing demands of the work environment. The ED RNs were described as fast and flexible, quickly responding to incidents and with an instinct for health care. The study participants learned these professional characteristics from their work experience in the ED. However, these characteristics were difficult to measure and recognize. The participants learned from their professional interactions with patients and their families and from their work experiences. Their interactions with many parties taught them to be sensitive and observant and to make intelligent judgments on treatment and care. The more experienced participants were proud of their achievements and felt professionally accomplished. The positive outcomes of nursing kept them in the field despite the stress of working in an overloaded ED. Senior participants provided the benchmark for effective practice in the ED work environment. The process of adjusting work priorities is elaborated the following extracts.

RN Huang: Working in the ED requires flexibility and a quick response with a brave work attitude…It is difficult to describe and explain that feeling. Let's call it an instinct. You [RN] needed an accurate instinct to do your work.
RN Hsieh: You [RN] need a distinct and orderly mind to manage work. Situations happen quickly, you need to keep calm and manage all of the situations in an orderly manner.

Implementing Temporary Policies. Three temporary policies were often enacted when the ED was perceived to be overcrowded. There was no effective solution for ED overcrowding as it had multiple causes. The temporary policies, however, helped participants to relieve tension and gave them some optimism because the problem had at lease been recognized. The first policy was an announcement over the ED intercom that there were no beds available in the wards or the ED (RN Mei's account below). This announcement informed all patients, families, and RNs of the current situation. The participants realized from the announcement that a difficult period of work had begun. Yet it was not seen to be helpful because it did not extend outside the hospital or to incoming patients. In the second policy, as reported by RN He, a split-flow process was applied to patients waiting to see a physician; this rapidly relieved the stress of high patient numbers. This policy was established so that patients with minor and easily managed problems could see a doctor before patients with severe health issues. This policy brought more patients to the ED. The third and most effective policy to reduce patient numbers was to assign ED patients top priority for hospital admission, as described by RN Chang. The hospital's admission department had to apply equitable admission procedures to different departments. These temporary polices gave participants hope that patient numbers would decrease along with their work stress.

RN Mei: If patients could be admitted to the wards, the ED would not be crowded. We often heard broadcasts from the hospital saying "no bed available in this hospital" when an overcrowded ED occurred. When I heard that news, I felt desperate because that meant

the beginning of more patients in the ED.

RN Chang: There was an experience of ED overcrowding that lasted one week and the president [chairperson of hospital management] said the ED patients were the first priority for admission to the wards.

RN He: To see a physician in the ED depended on a split-flow of the triage level. So patients in the fourth or fifth level of triage may see a physician earlier than those in the third or second level of triage.

3.4. Subcategory four: reaching self-expectations

The subcategory of reaching self-expectations (RSE) was related to the subcategory of having psychosocial worries (HPW). When HPW was greater than RSE, the participants compromised themselves continuing ED work. RSE consisted of praising the self as a helping role and performing professional work.

Praising Self as a Helping Role. Most participants entered the nursing field with a passion for working in the ED as their first career choice. The participants had lofty ideals for their role as caregivers. Although the ED work was physically and psychosocially demanding, the RNs fought for their patients, as discussed in the sections on reduced treatment time and patient safety concerns. The participants perceived that the ED patients were frail and needed the most assistance. How to finish their work was their only focus during their on-duty hours. Friendly feedback satisfied the study participants' needs. The participants stated that more professional respect from patients, families and physicians would encourage them to advance their careers. Too many patients in the ED challenged the RNs commitment to caregiving, perceiving them to be ignoring patients' needs. As the following statements reveal, the participants contributed to patient care but asked for little feedback to improve their attitudes at work. Instead, self-praise supported their professional commitment.

RN Xiao: To work in the ED is valuable for my career, especially when I receive acknowledgement from families. Sometimes I feel disappointed because I sincerely gave my best to the patients and got no feedback.

RN Luo: Although practicing in the ED is tough, the work is attractive. Just give me a smile and I know you (patients or family) are saying thanks. I tell myself to help people as much as I can. Serving frail people is my motto.

Performing Professional Work. Participants had a strong sense of professional responsibility and were proud of their knowledge and skills. They particular prided themselves on their ability to respond quickly to situations in the right order. They had learned from their work and were eager to advance their knowledge. Thus their views were transformed: heavy workloads in an overcrowded ED were a learning experience. They were optimistic that this work could assist people and advance their own knowledge. When the participants assessed their work value, they recommitted to their profession.

RN You: My work is a profession and I am a professional. I do not want to see a negative image in people's eyes about this professional role. Too many patients here at a time is a psychological overload, not work excess.

RN Luo: I hope the quality of our care can be improved even more. Actually, we often ask ourselves if there things that we can improve further. The answer is definitely yes. Patients will need those skills when they go home to avoid complications from their condition. That is a promise of the professional role to patients as a RN.

The core category (see Fig. 1) of this study is seeing and taking. The participants viewed their mission as professional nurses as seeing people's needs and taking care of them. The participants knew their workload was burdensome but took all opportunities to overcome adversity in order to help their patients. They knew their work caused

psychosocial stress, but were committed to their profession. Even in the difficult environment of an overcrowded ED, they bravely faced their professional challenges and responsibilities. Placing nurses in the hostile work environment of an overcrowded ED is controversial. The health care system, hospital administration, health care policies, citizens, and nurses must work together to improve ED overcrowding.

4. Discussion

EDs in Taiwan are often overcrowded, leading to blocked access. ED patients require fast access to meet their needs. Many people visit EDs as a convenience for minor discomforts or personal reasons rather than for life-threatening illnesses or injuries. Those who do not meet the ED criteria can get help in the outpatient department or clinics, but they prefer the ED because there are no time constraints. Unlimited numbers of ED patients cause overcrowded EDs and create an environment of ongoing work tension. As ED RNs provide direct patient care, they are exposed to high levels of work stress that manifest physically, psychologically, and psychosocially. ED nurses accept their heavy workload as part of the job of professional nursing staff. Insufficient support from different levels of authority, such as the hospital administration or government health ministry, leads ED nurses to rely on colleagues working cooperatively, as also reported by Tubbert [29]. Tubbert's study found that interpersonal connectedness was a strong predictor of resiliency for overcoming adversity. The results of nursing work burden have been linked in the literature to quality care [30,31], patient safety [32], high turnover rate [33], and a shortage of nursing staff [34]. The consequences of ED overcrowding following negative events have also been identified [24].

The participants in this study described working in an overcrowded ED. They reported that they knew the causes of ED overcrowding but had limited power to change the situation [25]. Limited support was provided to the nurses and they usually relied on collaboration to overcome adversity. ED overcrowding has become the norm; it is difficult to solve and authorities often ignore it. The participants reported that some inappropriate responses initiated a negative work cycle and made caregiving even harder. Nursing care in an overcrowded ED was described as "tolerating physical overload" and "having psychosocial worries" that result in "doubting work value". Doubting work value diminishes nurses' professional attitude and enthusiasm for their jobs [26]. The effects severely impacted the work-life balance [27] and job satisfaction [29] of the participants in this study. The effects even have significant influence on the quality of care [35,36] and patient safety [37,38].

The work experiences of nurses gave rise to categorization of ED caregivers as experts, novices, or advanced beginners. The participants noted that new nursing staff would quickly fail although they initially brought passion to their work. Failure at work resulted from a professional environment that was unable to support the work of new nursing staff. ED staff found it difficult to be fully committed in an environment with high physical and psychosocial stress.

There seems to be no effective solution to the problem of managing an uncontrollable ED. The turnover rate in the first year of work is high [39]. A potential loss of qualified nurses associated with ED overcrowding accelerates the shortage of ED manpower. Work resilience depends on maintaining optimism in the ED workplace. Frequent physical and psychosocial work overload may weaken RNs' passion for their profession, and ultimately experienced RNs may resign. However, optimism motivates an individual's ability to plan for diversity and reach the desired goals of positive health care outcomes [13].

The participants in this study brought their professional passion into the nursing field but reaped few rewards. Most professional rewards are from the participants' inner feelings and beliefs in nursing; little compensation is offered from the external nursing world. Disincentives do not encourage nurses to work in the field, especially since the profession poses challenges such as a high risk of workplace violence [40].
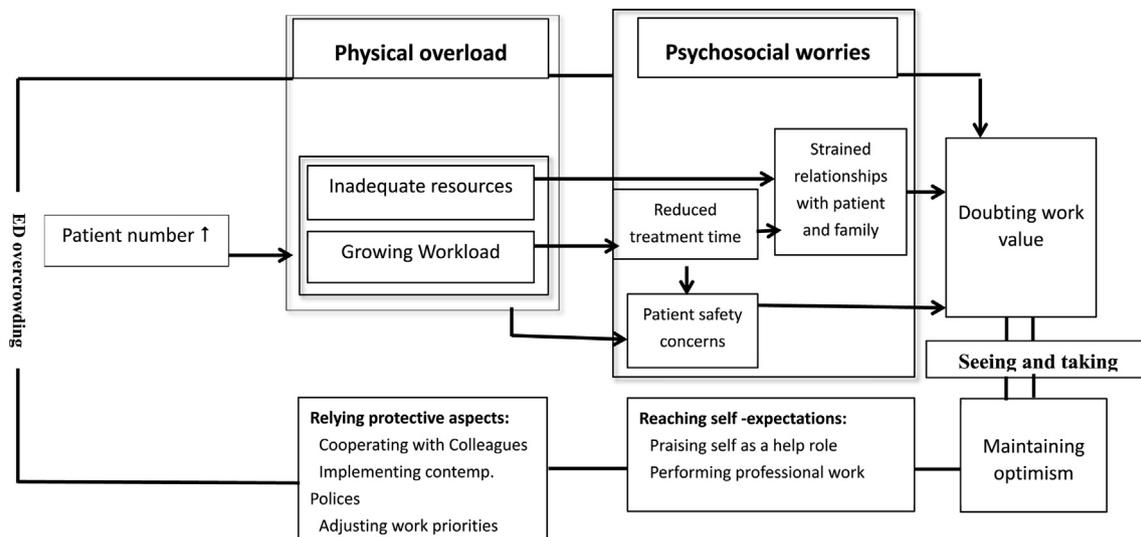
Fig. 1. Professional resilience in an overcrowded emergency department.

The participants reported that their professional expectations relied on protective aspects and reaching self-expectations, which helped them maintain their optimism and reject doubting their work value. This study found that the participants needed ways to alleviate their professional tension and emotional support to continue working in the ED. Although the participants willingly faced the ED challenges, many incentives are necessary to keep nurses in the field. Maintaining a positive attitude is an ongoing process of professional resilience to guide RNs. Timely support improves ED care and helps RNs cope with ED overcrowding.

The results of this study have furthered our understanding of the experience of nurses confronting ED overcrowding. Both patients and health providers suffer due to ED overcrowding. An overwhelming ED situation causes a near breakdown in the role of emergency care. Urgent appeals to authorities are necessary to solve these problems.

5. Conclusion

The multifactorial causes of ED overcrowding are complex and not easy to fix. ED overcrowding is a persistent and unacceptable work situation that challenges Taiwanese nurses. Nurses do their best to care for critical patients and are disappointed when ED overcrowding continues. They are the largest group caring for patients directly but feel they receive limited support. They are under a great burden and feel they receive minimum rewards from their work, leading them to discount their professional value.

This study's findings indicate that nurses' optimism sustains them in a difficult work environment. Issues related to ED overcrowding led to pessimism among health care providers and patients. Although currently nurses understand the problem and are accountable for their professional role, authorities need to face the problem of ED overcrowding. Work rewards as protective aspects from outside the nursing profession encourage nurses to adopt a more proactive attitude toward work adversity. This would benefit patients, families, and health care providers and provide a sound system of acute and emergency care.

Study limitations

Two study limitations are gender and hospital characteristics. Only female participants were recruited for this study. Male nurses' perspectives on working in an overcrowded ED may differ. Another limitation is that the study was conducted in one tertiary hospital. It would also be relevant to represent nurses' perspectives on ED overcrowding from different types of hospitals.

Recommendations

Study findings indicate that the hospital administration and future researchers need to consider developing strategies for appropriate access to an ED. In addition, hospital authorities should seek to find ways to overcome professional difficulties and offer incentives to improve motivation to continue working in this challenging environment.

Conflict of interest

All authors listed in this study do not have any interests that might be interpreted as influencing the research.

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