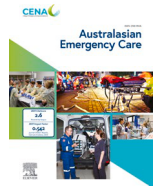




Contents lists available at ScienceDirect

Australasian Emergency Care

journal homepage: www.elsevier.com/locate/auec

Charge nurses' perceived experience in managing daily work and major incidents in emergency departments: A qualitative study

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ARTICLE INFO

Article history:

Received 11 November 2021

Received in revised form 24 February 2022

Accepted 28 February 2022

Available online xxxx

Keywords:

Charge nurse

Emergency preparedness

Emergency department

Leadership development

ABSTRACT

Background: Emergency department charge nurses are expected to oversee the quality of patient care, direct work, and the allocation of resources. The charge nurse is the unit's frontline leader, and he/she must have proper leadership training and support to carry out duties effectively. This study explores how charge nurses perceive their role in managing daily work and major incidents at the emergency department.

Methods: A qualitative study based on focus group discussions using a semi-structured interview. Participants were 12 charge nurses from four Swedish emergency departments.

Results: For data analysis, a systematic text condensation method was used. The analysis of data generated four categories: (1) Coping with chaos; (2) Need for further training; (3) Feeling of inadequacy; and (4) Lack of strategies.

Conclusions: The study concluded that the emergency department charge nurse has frontline duties that are diverse, multifaceted, require good leadership qualities, and lack detailed job description. Charge nurses confront many challenges in their daily work, often with little training or the opportunity to develop in their professional. This study provides understanding of the concerns charge nurses hold about working as frontline leaders and that departmental heads must support the education and training of their charge nurses.

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Introduction

Charge nurses (CNs) are important leaders in their respective hospital units [1–7]. When becoming a CN, the nurses often perform their duties with limited leadership training or role clarification [1–4,6,8–10]. This restricts leadership development, and causes unnecessary stress for the CN [2–4,11]. However, registered nurses (RNs) transition to CN is not well described or understood [12]. While several studies have emphasized the importance of role preparation and competence development [2,3,8,11,13], less research has focused on how CNs perceive their situation [1,3,6].

This study was based on interviews with RNs working as CN in several emergency departments (EDs) in Sweden. In Sweden, the transition from RN to CN is largely based on clinical skills and

previous ED experience. Together with the physician in charge, the CN oversees the quality of patient care, gives support to the staff, leads the team, and allocates work and resources on their designated shifts. In their role as CN, nurses are required to handle unpredicted events, manage crises, and quickly adapt to new situations. Emergency departments are under constant pressure, and this load increases the risk for medical complications [14,15]. Hence, it is essential for the ED staff to have an “all-hazards” approach if they are to cope with diverse emergency situations [16]. ED nurses are the first to receive and manage injured and ill patients, patients contaminated by hazardous material, and those with infectious diseases.

CNs are the first to receive an emergency alarm and play a key role in their local hospital disaster plan [17]. Although major incidents are rare, CNs must be trained to deal with them. For the purpose of this study, major incidents are defined as “a situation in which available resources are insufficient for the immediate need of medical care” [17].

The role of the nurse in major incidents, and the importance of training for this are stressed by the International Council of Nurses

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<https://doi.org/10.1016/j.auec.2022.02.003>

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[19]. Despite this, disaster drills and exercises are not included in the Swedish nursing education system. A review of the literature shows that nurses are poorly prepared to deal with an major incidents [20–24].

The prospective CN must be trained to be a frontline leader. Despite several training methods, the impact of training remains unclear [1,2,11]. A systematic review of the literature performed by Delamater and Hall³ revealed that structured training for CNs has a positive impact on how they perceive their ability to lead and communicate. Dols et al. [4] identified significant positive changes in CN performance following an evidence-based education program. However, CNs continue to report the lack of structured training and development, making it difficult to bolster confidence in their role as CN [2,3,13]. Furthermore, Krugman et al. [13] argued that CN training programs must be tailored to meet the specific requirements of that role. Moreover, Delamater and Hall³ and Cathro⁶ point out that relevance of education to the role as CN is crucial.

The role of the CN is well described in the literature [1–6,13,21], but little is known about how ED CNs experience their situation. This study aimed to explore how charge nurses perceive their role in managing daily work and major incidents in the ED.

Methods

Study design

This was a qualitative descriptive study based on focus group discussions using a semi-structured interview technique [25]. A qualitative study was considered essential to gain a deeper understanding of how charge nurses perceive their role. The design of the study was guided by the consolidated criteria for reporting qualitative studies (COREQ) [26].

Setting of the study

Sweden, with a population of 10 million, has a publicly funded health care system free of charge at the point of care [27]. The healthcare system comprises 21 regions and 290 municipalities. Each region is responsible for providing healthcare in their domain, and there are approximately 70 general hospitals and seven university hospitals in Sweden. Around two-thirds of all hospitals provide emergency services 24/7. Swedish EDs vary in their assignments, structure, staffing, load, and type of patients attending [27]. Nurses in Swedish EDs have received either basic or specialist training.

Participants

Fifteen EDs from rural and urban hospitals all over Sweden were invited via e-mail to take part in the study. The departmental heads were informed of the study after which written consent was given for their CNs to be approached. Four hospitals accepted to participate (Table 1) three of which had CNs working around the clock. A purposive sampling technique was used. Experienced RNs who functioned as CN were invited to participate. Other healthcare personnel including managerial positions were excluded. In all, twelve

CNs accepted to participate. Three participants per hospital resulted in four focus groups.

Data collection

Data were collected at focus group discussions [28]. A semi-structured interview guide was developed by CH, SJ and MR. The interview guide was tested at a pilot interview. The interview was conducted with a CN who were not included in the study. Minor modifications were made based on the feedback from the test. Focus groups discussions were conducted during March and April 2021. Due to the COVID-19 pandemic, all focus groups met online using software Microsoft Teams and Zoom technology platforms. All sessions were held in Swedish and began with the questions: 1. How do you perceive the CN's role in day-to-day work? and 2. How do you perceive the CN's role in major incidents response? This was followed by transitional questions, key questions, and, if necessary, follow-up questions asking the participants to clarify their answers (Supplement 1). All participants were familiar with the online platforms used. The focus group discussion lasted between 45 and 70 min and were audio-recorded, and transcribed verbatim in Swedish. The interviews were conducted by CH, with SJ taking notes and making observations at each session. CH and SJ have extensive experience, both as RN and CN in the ED. The quality of dialog was assessed by the authors to be strong based on the interviewer's previous experience, the CNs ability to familiarize themselves in the problem area, as well as the openness between the CNs and the interviewer.

Data analysis

Transcripts were coded according to Malteruds method for systematic text condensation [29]. Choice of method was due to the strategy's feasibility, utility, and transparency. The analysis comprised four steps:

1. Obtaining an overall impression of the material and making sense of the data. Repeated reading of the interview transcript yielded seven preliminary themes; the spider in the web, challenging work, shouldering responsibility, trust, loneliness in their role, practice, and training.
2. Identifying and sorting meaningful units – from themes to codes.
3. Condensation by analyzing code groups, subgroups, and themes. Coding was reached after discussion between CH and SJ.
4. Synthesis from condensation in step 3, making the connections between the themes and texts representing results of the interviews (Table 2). In this step, the process was passed back and forth until agreement between the authors was reached.

The strength of the analysis was confirmed by MH and MR and the final result revealed four categories covering most aspects of how CNs perceive their role in managing day-to-day work and MIs in the ED. Throughout the thematic stepwise analysis, the authors systematically reflected on the criteria for information power described by Malterud et al. [30].

Ethical considerations

The study complied with the Helsinki Declaration on research ethics [31]. Approvals was obtained from the healthcare organization. Written informed consent was provided by the participants after receiving information of the purpose of the study. Participants were informed that participation in the study was voluntary and that the interviews would be treated confidentially and anonymously. Data were processed according to the European Data Protection Regulations [32].

Table 1
Demographic data of emergency hospitals included.

	Population catchments (n)	ED visits per year (n)	RNs per day (n)	CNs Employed (n)
Hospital 1	100,000	25,000	11	10
Hospital 2	250,000	50,000	27	14
Hospital 3	345,000	66,000	37	12
Hospital 4	187,600	50,000	21	15

Table 2
Example of data analysis process.

Interview guide	Preliminary theme	Meaning unit	Code	Category
What is included in your work as a CN?	Spider in the web	"Right, now, during COVID, the teams cannot have their phones inside the treatment room, and they stay there longer than usual, and the phones is left outside. When calling from e.g., x-ray the CN has to answer..." (CN 2)	It feels like playing an everlasting "ping-pong match" when you must assist several calls and answer questions all at the same time.	Coping with chaos
What qualities must the CN have to be able to carry out their duties and managerial work?		"...in this situation the CN turned out to be a liaison center, everyone called us and asked if we had electricity, we kept in touch." (CN 7)	Liaison function prepared on questions from everywhere.	

Table 3
Participant demographics.

Demographic characteristics	n	%	Median (years)	Range (years)
Gender				
Female	12	100		
Male	0	0		
Age				
			48.5	32–62
Clinical experience in years				
Registered nurse			16	4–28
Charge nurse			5	1–19
At current ED			15	2–27
Degree				
Education Bachelor	6	50		
Education Master	6	50		
Training at the place of work				
CN training	12 ^a	100		

^a Ranging from a half-day training session with an experienced CN, to internal and external training such as leadership and media-management, medical response to MIs and emergency management.

Results

The degree of experience of the participants, both as RN and as CN, varied (Table 3). Their professional training varied from a half-day training session with an experienced CN (n = 4) to internal and external training in leadership, media management, medical response to MIs, and emergency management (n = 8). Some CNs had completed university education in a subject of particular interest. All CNs had experience of leading the ED team through an MI caused by COVID-19. The results are grouped into the four categories derived from the analysis: (1) Coping with chaos; (2) Need for further training; (3) Feeling of inadequacy; and (4) Lack of strategies.

Coping with chaos

The CNs described their job description as including two parts. One dealt with organizational issues, primarily in the ED, but also, to some extent, the hospital in general. The second part regarded being a role model for members of staff and having the ability to pay attention and give support. They discussed the need to guide and assist staff in problem solving while being sensitive to their psychosocial well-being.

"... that they can come to us, that it is allowed to feel as they do, and to cry." (CN6)

During their scheduled shift, the CN is in charge and usually the only CN on duty. They emphasized that their work could feel lonely, especially out of hours. One concern was lack of support from departmental head and therefore they preferred to discuss things with other CNs. They perceived having to cope with chaos while on duty, employing their flexibility and ability to fill several roles. One CN described it as playing an everlasting "ping-pong match".

"... many times, not only do you have your own work to do, but you're also a telephone operator, receptionist and a liaison center for doctors and everyone else who wants an examination room." (CN 4)

The CNs acts as contact person for both internal and external actors, which means that they often have to answer several telephones and questions online while at the same time carrying out their work in the ED or supervising staff during a major incident. They expressed the feeling like being a switchboard operator or the hospital's own "google" – what the CN does not know, no one knows. One CN expressed the feeling of being a search engine.

"You can say that we are the hospital's own google – what you don't know, the EDs CN knows." (CN 12)

CNs saw themselves as a sounding board, prepared for any sort of questions from anyone, from hospital management, to service personnel. Their duties were described as stressful and hectic, but at the

same time rewarding. In fact, this was one of the reasons why some applied for the job. In the long run, they felt it had contributed to growth and development in their profession.

"It's about leading the work without being a manager." (CN 2)

An important skill is learning how to prioritize and to coordinate patient flow while maintaining patient safety. CNs saw themselves as problem solvers for their staff, and one described it as "being an extra Mum" to whom staff go for guidance. They stated that to become a skilled CN, a nurse should have several years' experience in emergency care since this creates a sense of security, both for themselves and their staff. If the CN remains calm, then calmness spreads to the rest of the staff.

"Building up that quality during day-to-day work means that the group will follow you as a leader during an MI." (CN 10)

Need for further training

The standard of training and drills for the role of CN and response to MIs varies considerably between regions. They described regular and frequent local exercises and training, that follow a curriculum (n = 6), while others had no training at all (n = 6).

"Laughs – far too little. The feeling that we are not allowed to train for our role is perhaps more obvious now than before, but I think we need to practice." (CN 9)

Preparation for the role as CN was discussed. They stated that in view of such heavy responsibility, the lack of training in leadership is not conducive to feelings of comfort and confidence. All CNs agreed that they lacked a mentor and a forum where they could exchange experiences and strengthen their self-confidence. One shortcoming was how little they knew about how the regional healthcare authorities handle major incidents, acute care, trauma care, and events with hazardous material. They expressed the need for local, regional, and national forums to exchange information and provide further education and training. Some CNs were unfamiliar with local guidelines or lacked clear major incident response plans and regular exercises. They pointed out the importance of clear guidelines in reducing stress and reinforcing the sense of control. Guidelines strengthen them as a group in that they spread the burden of leadership and create a sense of security, which in turn increases patient safety.

"...emergency room exercises and shorter start-up scenarios...also creates security..." (CN 5)

Feeling of inadequacy

The CNs perceived that members of staff believe they know and can fix everything, as well as CNs themselves have high expectations. This becomes particularly clear in a serious situation when staff fully expect the CN to solve all problems. This expectation creates an underlying sense of inadequacy, especially in those who have not worked long as a CN. There are certain events that CNs mentioned as being stressful e.g., the situation where many seriously ill patients and staff shortage may affect patient safety. The COVID-19 pandemic caused crowding problems never experienced before. Patients in the ED had to be separated, and rooms for those with suspected COVID-19 ran out while those for non-infected patients remained empty. The CNs expressed their concern about the lack of preparation for events such as COVID-19.

"...people sat outside in their car for three hours because we could not take them in." (CN 7)

They also expressed feelings of insecurity when dealing with rare events such as hazardous material, infectious diseases, or care of children. This increased work stress.

"...that is my horror scenario with all that it entails – the children's parents, relatives, and even the emotional part, I would have a hard time." (CN 10)

All CNs expressed the need for leadership training. There are times when they do not feel fully competent, and that feeling of inadequacy and uncertainty in their role as leader is a burden. The feeling of not being confident in a member of staff competence was also mentioned as a cause for concern. Patients and family concerns were expressed as emotionally provoking and could be difficult to manage. For a CN to work efficiently in a high-pressure situation, their mind must be totally focused on the situation. One CN described it as:

"...having to go into one's own bubble to concentrate on leading and guiding staff through the situation." (CN 8)

Lack of strategies

The transition from ordinary duties to supervising situations that exceed the resources available such as crowding or a major incident, was perceived as challenging by all CNs. The reason for this is that they must take the role of leader and make rapid and sound decisions in a chaotic situation. Being mentally prepared was seen as a skill that contributes to safer management of the situation. Everyone should be clear as to how to act in different situations. All CNs interviewed expected their members of staff to be familiar with practical guidelines on patient assignments and the major incident response plan.

"...that they know what to do when it happens, so you do not have to stand there and explain things and what is expected of them..." (CN11)

Some CNs follow guidelines and plans to the letter while others improvise. Those who strictly follow guidelines expressed confidence in their quality, while others felt that guidelines are not always applicable, and that they must act to the best of their ability. CNs who collaborated with their disaster preparedness coordinator seemed more secure, going through several possible strategies for various scenarios and allocation of resources on their shift.

"I think that's how you practice every day, I always have a "shit plan"...what should I do then, I always plan ahead. I have plan A, B and C and maybe D ..." (CN 3)

The application of critical thinking in the decision-making process was perceived as a skill derived from everyday practice and previous experiences. In the absence of clear guidelines, several CNs explained that they employ their own strategies based on what the situation demands. In a high-pressure situation, own initiative was seen essential both in day-to-day work and major incident response. One CN explained that you must be careful about when, where, and how you deviate from the official plan so that your own decisions do not affect patient safety and staff continue to work together towards the common goals without problem.

Discussion

The findings of this study highlight that lack of skills necessary for a CN to function well in the ED makes it difficult for them to fulfill the expectations and responsibilities the role entails, both in day-to-day work and during major incident response. Several charge nurses participating in the study lacked training and support from their departmental head. This finding is consistent with previous studies [1,3,6,12].

Although, CNs described their work as demanding, they also expressed motivation and job satisfaction. This is also consistent with reports in the literature [1,6,12]. Charge nurses confront many challenges in their daily work, often with little training or the

opportunity to develop in their professional [1–3,6–8,10,12]. CNs described having to be adaptable and manage conflicts to be very demanding. Acquisition of experience and knowledge was often on their own initiative, based on following up real events and through reading the literature.

A common challenge and skill essential in the role of CN was to manage and effectively communicate with their staff. During the COVID-19 pandemic, some CNs found it difficult to establish control and order since patients were waiting both inside and outside the ED. Af Ugglas et al. described the difficulties caused by separated patient flows and the increased workload during the early COVID-19 pandemic, that affected both patient safety and staff performance [33]. When crowding occurs in the ED it becomes more difficult to maintain patient safety [15]. In a crisis, it is especially important that the CN remains calm and creates an environment with control and order. In addition to acting as a general nurse, the CN bears the responsibility to manage and lead those less experienced [2,3,6].

Taking on the role of CN means being prepared to accept responsibilities that go beyond the norm and the need for training in leadership was identified [1–3,6,12]. CNs in the ED are confronted with unpredictable diseases, work-related stress, and critically ill and injured patients. Taking command and organizing staff is of paramount importance for the CN during an MI [17]. Despite this, one of the main concerns expressed was not feeling secure or prepared to manage an MI, due to lack of adequate experience and training. Studies report that nurses in general are insufficiently prepared for disaster response [18,21]. The ability of the CN to respond to a major incident is hardly helped by a lack of clear response plans or regular local exercises. Some CNs designed their own alternative plans based on previous experience and training. To be prepared for the unprepared can sometimes mean that deviations from the official plan is necessary since it's not possible to develop guidelines and protocols that cover all major incident scenarios.

This study highlights the need for detailed job descriptions for CNs, as well as well-defined leadership standards and responsibilities. The most significant findings in this study was how the CNs perceived their role, especially the need for the support necessary to become a skilled frontline leader in the ED. This concurs with previous findings where CNs reported they lacked the training needed to function effectively [2,3,13]. Various programs to train and prepare charge nurses for their duties have been developed, described, and introduced over the last four decades [2–4,6–11]. However, there is little evidence of successful outcome [3,4,12]. Above all, there is a need for education and training programs designed to meet those challenges and difficulties that confront ED CNs in day-to-day work and when responding to a major incident such as COVID-19. It is time for the healthcare system to recognize the importance of CNs in the ED, and that departmental heads must support the education and training of their charge nurses and be aware of their responsibility to continuously plan, develop and follow up CN education. The ED CN must be encouraged to develop and become skilled in their role, otherwise, the role as CN will stagnate [2,3,8].

Limitations

The study was carried out during an ongoing COVID-19 pandemic, which meant that our method had to be modified when hospitals banned visiting in 2021. Each focus group was planned to consist of five participants. However, it was difficult for the research team to achieve this due to the pandemic. The number of participants (n = 3) in each focus group can be seen as a limitation. Furthermore, no male chose to participate in the study. According to the literature, sample size may vary depending on the homogeneity of the population being studied [28]. Given the homogeneity of the sample group and the decision to use purposive sampling the sample size

was sufficient to reach data saturation. Malterud et al. suggest that if participants are knowledgeable and specifically selected for the aims of the study, and if the discussions are rich, then a lower sample size is acceptable [30]. As the focus groups consisted of participants with different lengths of experience, this should improve the reliability of the result since different perspectives based on knowledge and experiences are captured. Furthermore, the steps taken in the data analyses to increase trustworthiness led to a rich insight into how charge nurses perceive their experience of leadership and responsibility. This may facilitate transferability of findings to similar settings. Preunderstanding could have helped the authors to extract relevant data, but the risk for biased interpretation must be considered [34]. To minimize bias, MH and MR were included in all stages of the study.

Funding

The research have not received any funding.

Conflicts of interest

All the signing authors meet the requirements for authorship and they have no conflicts of interest.

Acknowledgements

Our thanks go to the study participants for sharing their experiences and making this study possible despite the ongoing COVID-19 pandemic.

Disclosures

The authors declare that they have no competing interests. No funding was received.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.auec.2022.02.003](https://doi.org/10.1016/j.auec.2022.02.003).

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