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R. Antonie and M. M. Van der Heever

Full Length Research Paper

Experiences of critical care nurses regarding the utilization of enrolled nurses as relief staff in critical care units in the private sector

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Most critical care units in private healthcare in South Africa are staffed below maximum workload levels and additional staff is supplemented when needed. The additional staff often consists of enrolled nurses. In South African context, the enrolled nurse is a person who is trained to perform basic nursing care and works under direct or indirect supervision of the registered nurse. The aim of this study was to explore the experiences of critical care nurses regarding the utilization of enrolled nurses from a general ward as relief staff in critical care units. A descriptive design with a qualitative approach was applied. A sample size of $n=15$ was drawn from a total population of $N=377$, using purposive sampling technique. The findings demonstrated that some enrolled nurses perceived the critical care units as frightening whereas others viewed the distribution of the workload among themselves and the critical care nurse as unfair with the enrolled nurse feeling exploited. The critical care nurses perceived the experienced enrolled nurses as supportive and those with little or no experience in the critical care unit as a burden. Staff development for enrolled nurses who work in critical care units occasionally was found to be minimal and subsequently some critical care nurses disapprove their presence. However, nursing management encourage the use of enrolled nurses in the critical care unit to contain cost pertaining to labour. Enrolled nurses, who assist occasionally in the critical care unit to limit expenditure pertaining to labour, require supervision as well as ongoing development to ensure safe and quality patient care.

Key words: Critical care unit, patient-nurse ratio, staff management.

INTRODUCTION

Globally, staffing levels and working conditions in critical care units (CCUs) remain an important issue facing

healthcare organizations (Williams et al., 2006). Quality nursing care and patient safety are compromised if

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aspects such as staffing management and the business principles are not balanced. Consequently, nursing staff have difficulty in providing quality nursing care that supports and responds to patient care needs. Quality nursing care and patient safety are relevant due to the general shortage of nurses and specifically of critical care nurses (CCNs) (Albarran and Scholes, 2005).

The shortage of CCNs negatively affects staffing of CCUs. Financial and economic pressures on the healthcare industry have resulted in these organizations becoming more concerned about their market shares, being more competitive and maximizing reimbursements. The need for financial gain results in management implementing cost-saving measures pertaining to labour. These measures frequently include the reduction of staff numbers through termination and the increased use of enrolled nurses (ENs) (Finckler et al., 2007). Enrolled nurses attend shorter training programmes and are less expensive than using registered nurses (RNs) (Muller et al., 2008). However, the utilization of ENs in CCUs, irrespective of them being well-trained and experienced remains a concern. Moreover, the EN is trained to perform basic nursing care and should work according to their scope of practice under the supervision of a RN (Searle, 2006).

Despite the shortage of staff and budget constraints, staffing in a unit should be sufficient to address the workload created by patients and other activities in a specific unit. As a result, unit managers are responsible to provide adequate, trained staff 24 h a day. It is evident that inappropriate nurse staffing, that is more ENs than RNs, is associated with increased mortality, hospital acquired infections, falls, lengths of stay, medication errors, and serious adverse events such as cardiac or respiratory arrest (Sochalski et al., 2008).

In practice, there seems to be evidence of feelings of frustrations due to heavy workloads and a skill mix insufficient to ensure safe and quality patient care. Failure to balance staffing management, quality care and the business principles may have a negative impact on the patient, the CCN and the institution. Moreover, limited literature could be found that reflects on staffing requirements in South African CCUs and the utilization of ENs as relief staff. This article reports on the findings of a study on staffing management strategies such as the utilization of ward staff, that is ENs who work as relief staff in CCUs and the business principles.

Framework for staffing management

The literature framework (Table 1) illustrates how nursing regulations, human resources and the budget can be reasonably applied to attain patient safety and quality care. The South African Nursing Council (SANC) is the legislative body that governs nursing practice in South

Africa and specifies the scope of practice of all categories of nurses. The scope of practice specifies that the EN is trained to perform basic nursing care and should work under the supervision of the RN. Therefore, the liability of delegated tasks is on the supervising RN (Searle et al., 2009). However, the use of non-RNs, that is ENs, are encouraged as a cost saving measure (Finckler et al., 2007).

The recommended nurse-patient ratio in CCUs in England (Intensive care society, 2010) and the United States of America is 1:2 (British Association of Critical Care Nurses (BACN), 2010). In SA, the recommended ratio for CCUs ranges from 1:1 to 1:2 (The South African Society of Anaesthesiologists, 2011).

Limited resources and soaring healthcare costs have strained all healthcare delivery systems. In the quest to deliver optimal patient care, the unit manager has the dual responsibility to provide sufficient staff for safe patient care while considering the budget (Muller et al., 2008). The personnel outlay is the largest expenditure of the budget (Booyens, 2008). Furthermore, the personnel budget should be flexible to accommodate overtime, temporary staff, changes in salary scale and unexpected increases in patient census (Muller et al., 2006). The personnel budget should not compromise ethical principles of corporate governance. The King III report reflects a high standard of participative corporate governance with integrity in South Africa (King Committee on Corporate Governance, 2009).

Healthcare leaders should be responsible and adhere to the universally accepted business ethics and values congruent with the principles of good governance (King Committee on Corporate Governance, 2009). Moreover, companies should not operate independently from societies and the expectations of all stakeholders should be considered in decision-making. In addition, shareholders and patients have the right to credible information that relates to corporate governance (Muller et al., 2008). Enrolled nurses with basic nursing training (Searle et al., 2009) who are deployed in critical care units have the potential to negative impact patient safety. Therefore the use of ENs in CCUs seems not to reflect sound business ethics.

The practice of recruiting ward staff to alleviate workload crises is not new. The utilization of ward staff to accommodate staff crises is confirmed by Huber (2010) who explains variable staffing. This is a general staffing method where units are staffed below maximum workload levels and additional staff is supplemented when needed. Ward staff and inexperienced care workers often perform tasks well beyond their scope of practice, meaning that when a mistake leads to a patient's death or impacts negatively on a patient's health, the supervising CCN is often unfairly blamed (Bateman, 2009). Insufficient, inexperienced or untrained staff results in increased errors and patient risks (Aiken et al., 2002; Zondagh,

Table 1. Framework for staffing management.

Parameter	Information
Regulations	Professional organisations Legislation nurse-patient ratios
Patient	Classification systems
CCN	Characteristics Patient assignment
Hospital	Budget business principles

, 2004).

METHODOLOGY

A descriptive qualitative design was utilized as it is useful to obtain direct knowledge about experiences of health professionals concerning a particular phenomenon as explained by Neergaard et al. (2009). Consequently, this design was used to explore and describe the experiences of CCNs regarding the utilization of enrolled nurses as relief staff in CCUs in private healthcare. The study was conducted in three private hospitals in the Western Cape Metropolitan Area. Each hospital represented an individual private hospital group. One hospital is situated in the southern suburbs whereas, the second hospital is in the northern suburbs and the third hospital in a coastal region. One pilot interview was conducted to affirm the feasibility of the questions in the guide and the interviewing skills of the author. The interview confirmed the competency of the author’s interviewing skills and that the participant easily understood the questions.

Population and sampling

The study was conducted in the CCUs of three different hospitals in the Cape Metropole, with each hospital representing a different private healthcare company. The inclusion criteria represented the following: RNs (unit managers, shift leaders) working in the CCUs of the participating hospitals, ENs allocated to general wards who work occasionally as relief staff in CCUs, and CCNs who work via nursing agencies in CCUs. The unit manager provided details such as who were the shift leaders, agency and relief staff. Once institutional permission was granted, the author arranged meetings with the unit managers of the CCUs and obtained the off duty lists which reflected the staff working in these units. These participants were then directly approached by the author and the co-author (second author) who often accompanied the author during the recruitment phase. On approaching potential participants the author confirmed details such as years of experience, working as a shift leader or agency nurse and with regard to the EN, whether they indeed worked as relief staff in the CCU.

Polit and Beck (2006) recommend a sample size of 10 or less for qualitative studies. Subsequently, nine participants (three unit managers, two shift leaders, two agency nurses (RNs) and two ENs) were purposively selected and interviewed. The pre-

determined totals were based on the knowledge of the author that each CCU will have a unit manager but that not all CCUs have shift leaders who are permanently employed at the respective hospitals and that various hospitals have agency staff as shift leaders. Each unit manager represented a different hospital. One shift leader represented the hospital in the southern suburbs and another shift leader the hospital in the northern suburbs. The two agency nurses at the hospital in the coastal region also worked as shift leaders. The two ENs, respectively represented the hospitals in the northern and southern suburbs. One EN had vast experience in the CCU environment while the other EN had little experience.

On completion of the nine interviews, data saturation was not achieved, meaning different themes still surfaced. Since the sample size is determined by the saturation of the data in qualitative research (Burns et al., 2009) six more participants (two RNs and four ENs) were interviewed before data saturation occurred. The two additional RNs respectively represented the hospital in the northern and southern suburbs. The additional ENs were, one from the hospital in the northern suburbs, one from the hospital in the southern suburbs and two from the hospital in the coastal region. Overall, fifteen participants were interviewed between November, 2011 and March, 2012. No interviews were conducted in December, 2011. The ten week data collection period was due to the availability of the participants. Their work commitments and personal obligations prevented their immediate availability.

The interviews were conducted using a semi-structured interview guide that was based on the aim of the study and the literature reviewed. The guide contained three questions, that is ‘Describe your experiences of current staffing management in CCU’; ‘How do you experience working with relief ward staff in CCU?’, ‘Please explain your views on the work experience and qualifications of such staff’. However, when the ENs were interviewed, the second question was adapted as follows: ‘Tell me about your experiences when working occasionally in the CCU as relief staff’. CCNs who had worked for less than two years in the CCU were excluded from the study.

Data collection

The study received appropriate ethical approval and participants consent. At the time of the study the author worked as a critical care nurse at a private healthcare hospital. As a result, the hospital where the author worked was excluded from the study population. The participants at the hospitals involved in the study were unknown to the author. The author conducted all the interviews and the supervisor involved in the study was present during most of the interviews in the capacity of a moderator. The interviews were conducted by using the technique of reflection explained by Carl Rogers (Boeree, 2006) whereby the messages of the interviewee are summarized and reflected during the interview, ultimately ensuring that the interviewer understands the experience of the participants. Each interview lasted approximately one hour. The individual interviews were electronically recorded and transcribed within 24 h of recording. Thereafter, the transcriptions were verified by the participants, ultimately confirming truthfulness as advised by Lincoln and Guba (1985). In addition, the processes for data collection and analysis (recordings, transcripts and themes) were verified by the co-author involved in the study.

Data analysis

Data analysis was done according to the interpretive approach described by Terre Blanche et al. (2006). As prescribed by this

approach the transcriptions were repeatedly read and a general overview of the data was obtained. Thereafter, the predominant themes were identified. The data within the themes were subjected to in-depth analysis through the coding process. This analysis enabled the identification of commonalities and differences while considering generalities and uniqueness of the information.

RESULTS

The ages of participants ranged between 35 to 57 years. One participant was 35 years old whilst the majority (nine) of the participants were aged between 40 to 49 years and five participants were between 50 to 57 years of age. In addition, 14 participants were females and one male. Five themes were identified. These were i) workload distribution, ii) business principles, iii) critical care unit environment perceived as frightening, iv) ENs are a burden or support for the RN and v) in-service training.

Workload distribution

Several ENs experienced the distribution of the workload as unfair. ENs alleged that relieving in the CCU and nursing two high care patients is frustrating since the qualified RN cares for one critically ill patient. Moreover, the ENs stated that they do not always report the unfair distribution of the workload for fear of reprisal.

"...working with two patients where they've got qualified sisters working as well and they only take one patient, that's a bit of frustration. And a lot of the time the high care patients that they hand over to the staff nurses are more ill than the ICU patients that the sisters are looking after. So where the distribution of work is concerned it can be somewhat unfairly distributed and people don't normally open up their mouths" (Participant 11, EN).

"When you speak out you get a lot of lip from them, or you get, you get told you've got an attitude..." (Participant 15, EN).

The aforementioned findings suggested that ENs do not consider the patient acuity against number of patients allocated to different categories of nursing staff as it relates to their scope of practice. RNs are allocated higher acuity patients such as a ventilated patient, which is also related to the scope of practice for a RN. ENs are allocated to patients who are not on organ supportive devices and are classified as high care and not critical care. Such allocations are made to be congruent with the scope of practice for an EN. The comment also demonstrates a lack of knowledge among ENs about reasons for allocating patients to different categories of staff according to acuity levels and not necessarily

numbers (Kiekkas et al., 2008).

Business principles

Registered nurses who are trained CCNs are remunerated on a higher scale than ENs who possess a basic nursing qualification. The findings demonstrate a trend to utilize experienced ENs as a cost saving measure. The participants were of the opinion that although the patient was nursed by an EN, the company claimed full CCU tariffs from the medical aid insurers. The participants were concerned about this matter.

"There is a reason that they will rather book an EN over a RN, and rather an experienced RN over a qualified RN, it is entirely bottom line what am I going to pay you" (Participant 12, shift leader).

"Their expectations and what they bill the patient because you can't bill a patient the ICU rate for nonexistent care and that is what's happened" (Participant 9, unit manager).

The findings aforementioned indicated that the business principles takes precedence over which category of staff is used, that is, EN versus RN. Moreover, this practice may be seen as financially beneficial to the respective companies.

Relief staff: CCU frightening

Currently, ENs who are normally assigned to work in general wards are requested to relieve in the CCUs in crisis situations; these ENs experienced working in the CCU as frightening. This is reflected in the following quotation.

"It's very frightening to go and work there, especially if you come from the ward, staff planning is, I sometimes, I don't know if people is scared to work there, that there isn't enough staff there, that they ask the ward staff to go work there" (Participant 3, EN).

Consequently, the relief staff experience insecurity and anxiety in the unknown critical care environment.

Relief staff: Support or burden

Some RNs valued the idea that the EN is able to assist with the provision of basic nursing care such as pressure care and turning.

"...let rather you look after the patient, even if all you going to

do is turn and rub and I give the medication, at least then the patient gets care, where some people get so frustrated with having to support the person (EN), that it frustrates them (RN)" (Participant 2, Shift leader).

Irrespective of the support that the EN provides with basic nursing care, some RNs experienced the EN as more of a burden. Since the relieving EN is not used to the CCU setting they tend to spend more time completing basic tasks. Yet, the supervising RN in the CCU also spends time orientating them. Overall, the nurses acknowledged that all relief staff are orientated regarding the routine in the CCU and are supervised to ensure safe nursing care.

"...you don't get staff, and then you as the sister may have the ventilator still have to help them see that they have done their work and things like that" (Participant 2, shift leader).

"...even with our permanent staff [ENs] as well, you need to supervise them..." (Participant 5, Unit manager).

In contrast, other nurses did not support the idea of relief staff as a means to alleviate the workload. They aver that relief staff causes additional stress on the shift leader, impedes quality care and often has a negative cost implication (possibility of legal claims). Moreover the relief nurses are not functioning on the same level as the RN and therefore cannot replace the RN.

"I very rarely use staff who are from outside, it's always a challenge because, it puts so much pressure on the shift leader, it can affect the quality of the care delivered to the patients. It is often a cost implication that is actually not beneficial, so I don't like using "floats", who don't know the ICU who are not ICU people, or ICU thinking people. Because of the surgical ICU, even getting a care giver from outside is a problem for me because you don't know my infection prevention principles..." (Participant 1, Unit manager).

The aforementioned findings suggested that unit managers recognize the ENs' lack of knowledge. Subsequently, support systems for example, in-service training, should be in place and accessible to nursing staff.

In-service training

Although spot teaching and support do exist, formal in-service training for relief nurses is minimal.

"Nothing [in-service training] that's formal at the moment. Yes, on- the- spot training" (Participant 4, unit manager).

Considering their insecurity and how frightening the ENs experienced the critical care environment, it is clear that ENs who works as relief staff in CCUs can benefit from formal in-service training sessions.

DISCUSSION

The ENs revealed that they are assigned a too heavy workload in comparison to the RN. Yet, they are seemingly reluctant to report this, which indicate the authority of the RN over the EN. A recent survey found that 78% nurses feared personal reprisals or a negative effect on their career if they reported concerns to their employers (Carvel, 2009). Irrespective of them experiencing possible exploitation regarding the workload, the less experienced EN (worked twice in the CCU) reported that they experienced the critical care environment as frightening. The fact that the EN experiences the CCU as frightening indicates a need for in-service training to eliminate the fear associated with the unknown. Furthermore, the findings regarding the underlying cost implications (cost saving measures), suggest exploitation of ENs as supplementary staff and not necessarily due to staff shortages. It somewhat demonstrates that business principles instead of quality patient care presides over who should be hired as relief staff. The exploitation of ENs is further worsened due to the lack of formal in-service training for ENs who works as relief staff in the CCUs. The findings therefore show that a balance is required between maintaining business principles and quality patient care (Ball et al., 2004).

The practice of utilising relief staff (meaning ENs working in the wards that occasionally relieve in the CCU; in this study) between departments in response to shifting demands is not a new phenomenon and was noted as early as 1976 in Canada (Baughman, 2005). This was implemented by hospitals in the United States of America and Canada as a cost saving measure to combat spiralling health costs. The hospitals involved in this study use ENS to care for high care patients and they are allocated one or two high care patients. Literature confirmed a 1:2 nurse-patient ratios when nursing patients in CCU (BACCN, 2009). However, literature does not reflect a nurse-patient ratio for ENs in CCU.

Several participants viewed the utilisation of ward staff that is inexperienced in the CCU nursing as detrimental. A nurse may be regarded as an expert in one department and a novice in another (Rischbieth, 2006). Furthermore, research has shown there is an increase incidence of blood stream infections when relief nurses nursed patients who had a central venous catheter *in situ* for more than 60% of the time (Alonso-Echanove et al., 2003). These authors also explained that the increase incidence of infections with the use of relief nurses does not reflect individual practice but uncertainty and a lack of

detailed awareness of the relevant procedures and policies of the specific CCU. Yet, several participants were of the opinion that the use of relief staff in understaffed CCUs is of assistance. It is however important to have effective communication, education and orientation mechanisms in place to enable holistic and safe patient care.

Conclusion

Ward staff, usually ENs, are not trained and experienced to care for the critically ill patient. The lack of formal in-service training to secure safe patient care necessitates the implementation of staff development strategies.

RECOMMENDATIONS

Consequently, the findings of the study suggest the need to revise and implement scheduling policies and practices to provide a more supportive work environment for critical care nurses in general but most of all a safe nursing environment. Quality nursing care and patient safety are seemingly compromised in an effort to accommodate the budget. Consequently, nurse managers should reconsider the utilization of non-trained, inexperienced ENs.

LIMITATIONS

The study was conducted in the private healthcare institutions of the Western Cape Metropolitan Area and excluded the wider population of public healthcare institutions. Moreover, critical care nurses working in the public sector may have different views on the topic under study.

Conflict of Interests

The authors have not declared any conflict of interests.

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