Nurses experiences regarding staffing patterns in the surgical wards of a private hospital in Gauteng South Africa

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ABSTRACT

Background: Staffing patterns refers to the number and types or categories of staff assigned to the particular wards in a hospital. Staffing patterns that accommodate imbalanced patient to nurse ratios can affect nursing staff negatively. The negative experiences increased emotional stress, physical exhaustion, high nurse turnover and consequences of poor patient outcomes. The high patient to nurse ratios and the profitability factor of private hospitals virtually dictates the type of staffing patterns that are used in these wards. As such, the current staffing patterns appear to require nursing staff to work longer shifts as well as overtime work without a choice, the consequences of which are the effects highlighted above.

Purpose: The purpose of this study was to explore and describe nurses' experiences regarding staffing patterns in the surgical wards of a private hospital in Gauteng in order to develop recommendations for staffing patterns in these wards.

Methodology: A qualitative, exploratory, descriptive and contextual research design was used. Data was collected by means of in-depth semi structured individual interviews from a purposive sample of professional nurses working in the surgical wards of this hospital. Data was analysed using Tesch’s method of qualitative thematic analysis. Principles of trustworthiness and ethical principles to ensure the protection of human rights were applied throughout the study.

Results: The findings of the study revealed one central theme which reflected that participants experienced the staffing patterns of the surgical wards negatively. Two main themes emerged as, nurses had negative experiences in the surgical wards as well as negative emotional experiences related to the staffing patterns.

Conclusion: It is evident from the findings of the study that nurses are experiencing staffing patterns negatively.

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1. Introduction

Staffing in the context of staffing patterns is a function of providing a team of nursing staff who can fulfill the nursing needs and demands of patients in a nursing unit (Meyer, Nuade, Shangase, & Van Niekerk, 2009: 216). Staffing patterns are the numbers and types or categories of staff assigned to the (Mosby Medial Dictionary, 2009). The type of staffing patterns that are used in these wards. As such, the current staffing patterns appear to require the number of nurses on shift according to raw patient numbers (Hababevich, 2012: n. p.).

The workload and staffing pattern imbalances worsen the negative experiences of nurses and needs to be addressed and analysed in order to adjust staffing patterns (Lerman et al., 2012: 237). According to Numataya et al. (2006: 435–448) among other factors affecting the quality of nursing care, staffing levels are believed to be the most basic component with a direct bearing on nurses’ experiences and patient care. The authors add that understaffing does not only impede the provision of the planned care but also may introduce human error that jeopardizes patient safety and negative staffing experiences.

An examination of staffing patterns on scheduled unit staff nurses versus float pool nurses illuminated the fact that nursing staff experienced staff shortages, dissatisfaction within the work environment and challenging job assignments (Larson, Sendelbach, Missal, Fliss, & Gaillard, 2012: 27–32). Dhurup, Van Zyl, and Mokkathi (2014: 79) assert that staffing patterns and the loss of nursing staff, coupled with the distribution of those remaining has negatively affected nurses and the health care delivery system in South Africa.

The International Council of Nurses (ICN, 2009: n. p.) released the results of a survey conducted in collaboration with Pfizer which revealed that 46% of nurses indicated their workload was worse due to staff shortages as compared to five years ago. The researcher observed that staffing patterns in the surgical wards of the hospital did not accommodate high patient acuities of 1:6 with the current staffing patterns used and staff shortages. Minimum staff ratios are determined by the type of patient care unit, patient care needs and patient acuity (Reiter, Harles, Pink, & Mark, 2012: n. p.).

As a private hospital, revenue generation is an important factor and as such nursing staffing costs are always under scrutiny. This results in nurses working long hours with no breaks as the staffing patterns are designed with a high-patient-to-nurse ratio from 6 patients to one nurse during the week to 1:4 over weekends. According to the American Nurses Association’s [ANA] (2014: 2) study of 232,342 surgical patients done in Pennsylvania revealed that 4535 died within 30 days of discharge. The study also suggest that the differences in nurse-to-patient ratios (4:1–8:1) may have been a factor in these patients deaths [ANA] (2014: 2).

Some nurses complain on a continuous basis about staffing patterns and verbalise their dissatisfaction with the issue of staffing patterns and state that it should be addressed by management and policy makers as this is a problem not only for the nurses but also affect the quality of patient's care. It was, therefore, imperative to conduct this study as a need exists to develop recommendations for staffing patterns in the surgical wards of this private hospital.

The researcher has identified a gap in this type of research, as nurses continuously complain of the staffing patterns and staff shortages. The researcher observed that nurses are challenged to maintain high quality care in the face of the present staffing patterns and staff shortages. The aim of this research is to explore and describe nurses’ experiences regarding staffing patterns in the surgical wards of a private
hospital in Gauteng, in order to develop recommendations that will capitalize on the expertise of the staff and fill the gap created by the staffing patterns.

2. The problem statement

Staffing patterns is a concern in “context” as verbalised by the staff dissatisfaction, driven by private practice business model and evident in policies.

The above problem statement gave rise to the following research question:

- What are the experiences of nurses regarding staffing patterns in the surgical wards of a private hospital in Gauteng?

3. Research design and methodology

A qualitative, exploratory, descriptive and contextual research design was used to explore and describe nurses’ experiences regarding staffing patterns in the surgical wards of a private hospital in Gauteng. This research design enabled the researcher to understand the whole by exploring the depth, richness and complexity of the inherent phenomena (Burns & Grove, 2009: 54).

3.1. Population and sample

The population of this study is, nurses (professional nurses and enrolled nurse) registered under the Nursing Act, (33 of 2005). The target population was those nurses who had been working in the surgical wards of a private hospital in Gauteng for more than a year, who are experienced with different staffing patterns, and who volunteered to participate A purposive sample of five professional nurses with a Diploma in General Nursing Science, and three Enrolled nurses with Enrolled Nursing certificates participated in the study. The sample size was justified by data saturation. The participants were all female between the ages of 24 and 36, and were working in the surgical wards for more than a year.

3.2. Data collection

Data collection is a process of gathering data from the participants who voluntarily agreed to participate in the study (Burns & Grove, 2009: 269). Data was collected by means of in-depth semi-structured individual interview to allow the researcher to explore greater depth of meaning and obtain essential data for the study (Grey, 2013: 422, 424). The in-depth semi-structured individual interviews were conducted by an independent interviewer in order to prevent bias from the researcher as the researcher worked in the same hospital. The researcher was present during interviews to collect field notes. The hospital under the study is a private hospital that provides all services, has approximately two hundred plus staff members and the study was only conducted in the surgical wards. Participant invitation and consent letters were distributed in all four surgical wards of this hospital. Eight nurses who volunteered to participate were interviewed. The venue, date and time of the interviews was agreed upon by the independent interviewer and the participants. The in-depth semi-structured individual interviews were conducted to explore and describe nurses’ experiences regarding staffing patterns in the surgical wards of this private hospital.

During the interviews the following research questions were posed to the participants.

“What are your experiences regarding staffing patterns in the surgical wards of this private hospital?”

“What would you recommend for the staffing patterns in these surgical wards?”

Field notes were recorded by the researcher to add theoretical sense to collected data and to capture non verbal aspects of the interview that included hand gestures, tone of voice, repetitions, stammering, and emotions displayed during the in-depth semi-structured individual interviews. These assisted the independent interviewer and the researcher in remembering and exploring the dynamics that the interviewer employed such as the following interview skills: probing, reflecting, paraphrasing and summarizing. The in-depth semi-structured individual interviews were audio-recorded with the participants’ permission to ensure that all data was transcribed verbatim as participants verbalized their views. The interviews were conducted during the month of November in 2014. Each interview session lasted for approximately 30–45 min. All data is stored and will remain locked away for two years after completion of the study and thereafter it will be destroyed to enhance confidentiality.

3.3. Data analysis

Data from the audio recorder was transcribed verbatim before being analysed according to Tesch’s open coding method (Creswell, 2013: 184). Data analysis was conducted to organize and give meaning to the collected data (Burns & Grove, 2009: 44). This was completed by both the researcher and the independent coder who is knowledgeable about qualitative data analysis was present during data collection. The researcher and the independent coder had a consensus discussion and agreed upon the identified central, main themes and sub-themes. Certain measures to ensure trustworthiness were taken as discussed below.

3.4. Measures to ensure trustworthiness

To ensure trustworthiness the criteria of credibility, transferability, dependability and confirmability according to Lincoln and Guba (2005: 290–236) were used. The researcher enhanced credibility by having prolonged engagement with the participants and by establishing rapport before the interviews began. Prolonged engagement with participants, member checking and consensus discussions (Lincoln & Guba, 2013: 104) were applied by the researcher. In this study, the researcher provided sufficient descriptive data in the research report so that the potential researchers could
evaluate the applicability of data in other contexts (Polit & Beck, 2010: 492–493).

Transferability was ensured by dense descriptive data of the participants and a rich description of the results with supporting quotations from participants. The researcher ensured that data was consistent and neutral, and the results were subjected to change and stability to achieve dependability (Creswell, 2012: 246). Confirmability was used to establish the value of data (Creswell, 2012: 246). The researcher ensured confirmability through enquiry audits to maintain objectivity and neutrality of the data by using raw data from the tape recordings.

3.5. Ethical considerations

A formal approval of the research proposal was obtained from the higher degree committee and the Ethical Committee of the granted ethical clearance. Permission was also sought from the hospital management of the private hospital where study was conducted. Informed consent was obtained from each of the participants after they were informed about the study, the information included the purpose of the study, as well as the benefits of the study to the individual and institution. Principles that respect and protect human rights according to Dhai and McQuoid-Mason (2011: 14–15) which are, principle of respect, non-maleficence, principle of beneficence, principle of Justice, were applied throughout the study.

3.6. Discussion of findings

Analysis of the interviews lead to the revelation of one central theme emerged with two main themes and five sub-themes. The central theme was “nurses experienced the staffing patterns of the surgical wards negatively. This is supported by the following quote from participant 2 (PN) “the staffing is very low and it very hectic in this ward with only one professional nurse, we try to cope but it’s hectic”.

The two main themes that emerged during analysis of data were nurses have negative experiences regarding the staffing patterns in the surgical wards and negative emotional experiences related to staffing patterns. During data collection the researcher observed that patients were emotional and some found it difficult to discuss their experiences openly even though anonymity and confidentiality was thoroughly explained.

Below is a description of the findings obtained from the interviews which were integrated with the relevant literature to add to the richness and credibility of data, and to add meaning to the findings. The negative experiences (sub-themes) were articulated as shortage of staff and its effects, the experiences of somatic illnesses, the lack of support, the lack of caring from all stakeholders and the emotional experiences related to staffing patterns.

Table 1 gives a summary of experiences of nurses on staffing patterns.

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central theme: nurses experienced the staffing patterns in the surgical wards negatively.</td>
<td>1.1 Experiences of shortage of staff and its effect.</td>
</tr>
<tr>
<td>1. Nurses have negative experiences regarding the staffing patterns in the surgical wards.</td>
<td>1.2 Experiences of somatic illnesses.</td>
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<td>2. Nurses articulate negative emotional experiences related to staffing patterns.</td>
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asserted “I get overloaded with work due to shortage and staffing patterns, I have so many patients to care for and I am not managing”. Negative experiences could easily lead to negative outcomes for both nurses and patients that could define a destructive change and could also result in a destructive change made with intent. Destructive changes affect morale, motivation and productivity (McLaughlin & Garabalo, 2010: 19). According to Berman et al. (2014: 254) destructive changes are emotional changes that can occur due to decreased coping mechanisms.

The above statement is confirmed by participant 1 (PN) “I felt that I am not coping as a nurse in this environment due to staff shortages ... we are not enough...”

This is supported by Maville and Huerta (2012: 441) who assert that staffing patterns have an adverse effect on professional nurses who are attempting to provide quality patient care. Participant 6 (PN) said “I feel like most of my days I am unable to give quality care as it is deserved the patients, as we are always understaffed due to staffing patterns”. Negative staffing patterns do not only affect experienced nurses, but patients are also at equal risk of experiencing staffing patterns negatively (Maville & Huerta, 2012: 441). Hughes (2008: 78) concurs with the above authors by reporting that patients, as well as nurses in all categories, are at a much greater risk of experiencing various negative experiences due to staffing patterns. According to the American Nurses Association [ANA] (2014: 1) professional nurses have acknowledged and emphasised that staffing patterns are an ongoing concern that affects both nurses and patients.

Main Theme 1: Nurses Have Negative Experiences Regarding the Staffing Patterns in the Surgical Wards.

The findings that emerged from the analysis of the raw data, highlighted the fact that participants experienced the staffing patterns negatively and thus affected their performance and ability to provide quality care. Negative experiences may be described as experiences that make one’s life worse or has a negative impact on one’s developmental experiences (Warner, 2013: 23).

Participants 4 (EN) stated: “According to me surgical wards are busy and have sick patients who need total quality care, so with the current staffing patterns used we are overworked and we cannot provide quality care and meet the patient’s demands.”

Consequently Hughes (2008: 441) asserts that the staffing patterns and staff shortages have a negative impact giving rise
to heavy workloads and compromising the quality of patient care.

**Sub-Theme 1.1: Experiences of Shortage of Staff and its Effect**

The participants alleged that due to increased workloads, they are overworked and do not have sufficient staff to care for patients in the busy surgical wards due to the current staffing patterns. This is supported by Newman and Manley (2013: 13) who asserted that the shortage of staff has become difficult to address, which makes it difficult to find solutions to the overall shortage of nurses.

In this regard participant 1 (PN) indicated that: “I am required to deliver quality care with this number of staff and patients are expecting the quality care they deserve, whilst it is not possible due to shortage of staff.”

The effects of staffing patterns and nursing shortage are severe, whilst the supply of nurses remains low and may even worsen due to the nurses’ negative experiences on staffing patterns (Newman & Manley, 2013: 31). According to Newman and Manley (2013: 92), the greatest impact of shortage of staff is the effect it has on quality nursing care. They add that the perceived nursing shortage has negatively influenced efficiency of care and two-thirds of the nurses reported that the shortage of staff has adversely affected safety and the quality of care.

- **Experiences of challenges and risks due to high acuity**

Challenges and risks were experienced by the participants due to staffing patterns, workload, patients’ complaints, patient acuities and poor quality care. These experiences were perceived by participants as aspects that expose nurses to health risks and patients to negative effects due to the current staffing patterns and acuities. Adams (2010:10) defines ‘challenges’ as tasks that are non-trivial to accomplish and may be unique, recurring or continuing requiring mental and physical effort. Consequently Cherry and Jacobs (2014: 225) claim that planning for the adequate workforce will remain one of the critical challenges of the new century. In addition to the issues of quality and safety for patients, the nurses today are faced with a challenge of serious nursing shortages, high acuity and short staffing due to staffing patterns (Cherry & Jacobs, 2014: 18). Due to high acuities, the staff finds themselves experiencing shortages of staff in a busy surgical ward which contribute to challenges during emergencies as most of the nursing duties require the experience.

This is evident in the following statement concurred by participant 5 (EN) “We feel challenged especially when a busy surgical ward is staffed with auxiliary nurses and care workers as they don’t have the skill and knowledge to help.”

According to the National Department of Health, Republic of South Africa. (2012/13—2016/16), the majority of nurses continue to work with challenges of staff shortages and inconsistent staff ratios which impacts quality care and contributes to low staff morale.

- **Patients’ complaints**

Participants claimed that due to the shortage of staff caused by the current staffing patterns there are more patients’ complaints in surgical wards this is evident in the following words of a participant 4 (EN) “The patients complain about poor nursing care due to short-staffing often have patients that are very unhappy and complaining because they are not being fed on time, they are wet, and wait long for medication.”

Complaints from patients and relatives are of a serious nature, and it is important to know why patients complain. Stuart (2014: 763) found that patients and families may project their anger and helplessness onto nurses or the medical team, complaining about poor care, lack of communication, delays in call lights being answered, and the poor quality of food being served. Another participant said “patients complain we are not doing our work and the nursing service is poor just like in government hospital and this depresses me”. According to Patole (2015: 46), complaints relate to clinical incidences, adverse events, dissatisfaction with care provided and waiting time. Participant 6 (PN) asserted “the patients complain that their medications arrive late”. Gottwald and Lansdown (2014:152), support this argument that the majority of complaints received from patients were about poor quality care, time delays and poor communication due to staffing patterns.

**Sub-Theme 1.2: Experiences of Somatic Illnesses.**

Somatic effects are defined as etiologies of non-disease based form, which includes disturbances in physiological, psychological and emotional processes, as well as environmental factors (Kleinpell, 2009: 204). Participants identified somatic effects as negative physical experiences, due to staff shortages and being stretched physically to the limits due to the work overload as is evident in the words of one of participant 6, (PN): “It is really hurting, I am saying this because when I go home, my feet are sore and my back is aching…” “You still wake up the following day feeling very tired.”

A significant problem for caregivers is the physical symptoms that they suffer as a result of workloads according to Lin and Chen (2011: 515). In addition, they assert that nurses cannot avoid suffering physical symptoms, like backaches due to carrying patients, which may leave them with chronic pain.

Given the current staffing patterns, nurses experience physical symptoms like sore feet and backache which leads to increased absenteeism resulting in added understaffing in the wards. The unsafe staffing patterns have proven to pose significant implications to the overall satisfaction and wellbeing of the staff. The next sub theme to be dealt with is the lack of support and caring from stakeholders.

**Sub-Theme 1.3: The Lack of Support and Caring from All Stakeholders.**

Lack of support and caring is described as ignorance evidenced by lack of specific supportive role behaviour from management (Schmalenberg and Kramer (2009: 2). According to Schmalenberg and Kramer (2009: 3), nurses identify management support and caring on staffing patterns as essential to a healthy environment in order to deliver quality care.

Participants 1 (PN) stated: “We are working in a busy surgical wards and it seems nobody cares about the shortage of staff because we always understaffed.”

Participants alleged that they experienced a lack of management support with the current staffing patterns and staff shortages. The researcher is of the opinion that there are few solutions to staffing patterns and shortage of staff but there
are solutions that could improve negative experiences and consequently making them more tolerable.

Participant 6 (PN) said, “It is easy for them (managers) to make decisions rather than coming and experiencing the staffing patterns with us.”

This claim is supported by Gordon, Buchaman, and Bretherton (2008: 291), who asserts that managers are not readily available as they are always rushing from ward to ward and preoccupied with managing beds and pushing nurses to work with staff shortages without providing them support. Managers are no longer available for staff meetings to support staff, address shortage of staff and staffing patterns they add that many nurses felt that they had no support from nurse leaders and nurse executives regarding staff shortages and staffing patterns used.

Main theme 2: nurses discuss the negative emotional experiences related to staffing patterns.

Negative emotions are described as the tinder that feeds the fire of stress, anxiety and depression (Girdano, Dusek, & Everly, 2005: 69). In this study the participants expressed the negative emotional experiences regarding staffing patterns in the surgical wards of a private hospital in Gauteng. The negative emotional experiences were articulated as stress and anxiety, anger and lack of self-confidence, feelings of worthlessness, despondence and depression due to staffing patterns, and work overload. Girdano et al. (2005: 229), report that negative experiences in the workplace result in negative feelings such as fear, anxiety and stress, which is also known as emotional exhaustion.

Sub-theme 2.1: stress and anxiety.

Stress as a complex experience which is felt internally and it makes a person experience a sense of loss or a threat of a loss. Finkelman and Kenner (2013: 214) indicate that working with unsafe staffing patterns is the most stressful situation for nurses as nurses believe that staff shortages diminishes the quality of their work. The current staffing patterns resulted in increased stress and anxiety leading to reduced staff well-being and higher negative emotional experiences, in this regard participant 1 (PN) stated: “I am working under a stressful environment due to staff shortages, and that is not healthy for me, hence I am unable to give the quality care to my patients.”

According to Finkelman and Kenner (2013: 215), the most effective intervention for stress and anxiety management is eliminating stress completely and helping vulnerable people to cope is a goal of improving and developing health promoting behaviour. They add that effective coping could help reduce the negative impact of stress and prevent individuals from experiencing stress.

Sub-theme 2.2: feelings of worthlessness.

The interviews revealed that the participants felt worthless, helpless, powerless, inefficient, and incompetent, discouraged and had a low self-esteem. Participant 2 (EN) described her feelings thus: “You feel helpless, you are unable to do what you need to do as quickly as you should for the patient and you feel helpless most of the time.”

The participants gave up managing their negative emotional experiences before they even tried. When people are depressed they also feel worthless and make negative judgements that cloud their capabilities to cope with the situation. Arnold and Walsh (2007: 50), concur that depression is associated with a lack of energy, lack of concentration and feelings of worthlessness. The researcher is of the opinion that the feelings of worthlessness expressed by participants is a negative view of themselves which is related to the loss of interest or passion in performing their daily activities which involved total nursing care.

4. The recommendations

4.1. Recommendations for future nursing research

The recommendations are based on the literature and findings of the study. These recommendations may be applied in areas of nursing practice, nursing education and future research. The study was conducted in a private hospital in Gauteng, which comprised four surgical wards. It would be interesting to investigate the views of participants from different private hospitals as well as public hospitals in South Africa. The researcher recommends further research on nurses’ experiences regarding staffing patterns is conducted in both public and private hospitals. The study may be conducted in other private and public hospitals and include research on the patients’ perspective of staffing patterns and the nursing staff family life could conducted.

5. Limitations of the research

In-depth semi structured interviews were conducted when the participants were off-duty and some of the participants were unable to keep the appointment due to family commitments. Some participants declined to participate in the study and thought they will be victimised for contributing even after confidentiality was explained. Follow-up interviews proved to be a challenge due to shifts and insecurities. The study was conducted in a surgical ward only in a private hospital. More insight may be gained on staffing patterns if the study is extended to other wards.

6. Conclusion

The interviews revealed that the nurses in these surgical wards experienced staffing patterns negatively as none of the participants mentioned positive experiences. Negative experiences were identified by the participants as working under stressful conditions due to staffing patterns and high acuities. Low nurse to patient staffing levels has a negative effect on nurses and patient outcomes. Patient’s complaints increased as a result of the staffing patterns. The study offered an insight into the nurse’s experiences regarding staffing patterns. The purpose of this study was achieved with the evaluation of the entire study to ascertain if the problem statement, purpose and objectives were addressed. Research findings were assessed to draw conclusions so that the relevant recommendations of the study could be developed.

The nursing practice will benefit from recommendations if implemented. Staff will experience less negative experiences and less patient complaints with an achievement of quality
patient care. The following recommendations for nursing practice were discussed:

- Develop a clearly defined policy of staffing patterns.
- Consider implementing approaches that support flexibility such as adapting nursing shifts and the nursing skill mix.
- Managers should have a systemic staffing approach to ensure that patients receive the care that they need regardless of the type of ward to which they are admitted.
- Managers should have accountability to develop procedures that ensure nursing staff establishment are sufficient to provide safe nursing care to each patient.
- Ensure that there are systems in place for effective responses to unplanned variations concerning staffing in predicted departments on nursing needs.

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