

Learning opportunities and challenges of nursing students during night duty at an Intermediate Hospital in Windhoek, Namibia

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ABSTRACT

Background: The night duty is identified as an opportunity for extending students' experiences that would not normally exist during the day. Third and fourth year nursing students in the Bachelor of Nursing (clinical) honors programme are allowed to do night duty. Despite that, the learning opportunities available and challenges experienced during night duty are not known.

Objective: The objectives of the study were to: determine nursing students' learning opportunities on night duty at Katutura Intermediate Hospital. And to determine factors that hindered teaching during night duty at Katutura Intermediate Hospital.

Methods: Quantitative descriptive was used as research design. The study population comprised of 104 (N=104) fourth year nursing students and the sample was 52 (n=52) students who have been placed on night duty. Sample calculation was done in line with Epi-info version 7.2.1. The expected frequency was 50%, margin error at 5% and confidence level were calculated at 80% fourth year nursing students who worked on night duty. Self-administered questionnaires with closed-ended questions were used to gather data. Data were analyzed using the statistical package for social

science. The ethical clearance and permission to conduct a study was granted from two institutions.

Results: Majority of respondents (73%) indicated that learning is taking place during night duty. Furthermore, 50% of respondents indicated they were taught as learning opportunities are available and identified by the registered nurses. The most skill learned is administering medications (52%). Students mostly learnt by attending procedure demonstrations by registered nurses (50%). Factors that hinder learning are staff shortage (54%), negative teaching attitudes by registered nurses (19%) and inadequate preparation for teaching students (19%).

Conclusions: The study has concluded that learning is taking place during night duty. Although the results revealed that registered nurses put more effort on teaching the students, there are some factors related to registered nurses that were identified as hindrances to learning. **Recommendation:** More nursing staff should be placed in units where students do night duty in order to facilitate learning. In addition, there is a need to conduct an in-service training on teaching in clinical settings for nursing staff to change their attitudes towards teaching. Sex-life, social isolation and economic distress. Coping theme consists of five subthemes; accepting to live with stoma, failing to accept the life with stoma, looking positively, fatalism and support systems.

Key Words: Learning opportunities; Nursing students; Night duty; Katutura Intermediate Hospital

INTRODUCTION

Clinical placement is an important component of nursing education and is fundamental to attainment of its goal (1). To serve its purpose, clinical teaching should be available in a training hospital for twenty-four hours a day (2). This means students should practice in wards anytime for continuation of experiential learning for her/him to master the skills of the profession, since nursing is a 24 hour a day (2). Therefore, nursing students should be allowed to practice on night duty. Night duty experience would indeed become a learning experience and not simply a working situation fraught with anxiety and danger (3). The night duty is identified as an opportunity for extending students' experiences that would not normally exist during the day (4). The state university in Namibia re-introduced night duty as a clinical placement strategy in 2013.

The nursing students attend classes at the university campus where they learn theoretical aspects of nursing. During clinical placement, students are attached to different wards where they apply the theory learnt in class into clinical practice. The nursing students from this university are required to do night duties during clinical attachment in different wards at the end of first and second semesters after they done with their examination. The third and fourth year students in the Bachelor of Nursing (clinical) honors programme are the only one allowed to do night duty due to adequate exposure to theoretical aspects of nursing.

Student nurses' clinical placements predominately occur over a weekday on a morning and afternoon shift which is not congruent with the reality of nursing practice as a continuous twenty-four hours care. Furthermore, at the end of the final undergraduate year a student might not experience

the nature of night duty work (5). According to Itona, the provision of care on night duty is different to that provided during the day (6). Therefore, students need to be exposed. Night duty is recommended as a highly appropriate model of professional clinical practice. This is due to its benefits of; allowing students to cope with travelling, especially if they are not accommodated in the hospital premises, its suitability to preparing good quality graduate, there is time to learn and time to teach, adjusting, and allows continuity of care (7).

Spencer argues that with preparation and forethought, learning opportunities can be maximized with minimal disruption to staff, patients and their relatives, which is the case on night shift (8). Nursing care is provided 24 hour a day, providing night duty clinical placements to student nurses have the potential to better prepare students for confronting their graduate roles, allowing them to make a smooth transition into the nursing workforce (4). With relatively little impact on the running of the ward, students can participate more actively. For example, they can be asked to make specific observation and write report in patient's files. This article reports on a study conducted to determine nursing students' learning opportunities on night duty at Katutura Intermediate Hospital. And to determine factors that hindered teaching during night duty at Katutura Intermediate Hospital.

RESEARCH DESIGN AND METHODS

Research design

In this study, quantitative descriptive designs were utilized. According to Burns and Grove it's designed to gain more information about characteristics within a particular field of study (9).

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Population and sampling

This study was conducted at the Katutura Intermediate hospital located in Windhoek, the capital city of Namibia. At the site where this study was undertaken, a total of 104 (N=104) fourth year nursing students in the Bachelor of Nursing Science (clinical) (honors) from the university main campus worked night duty in the academic year 2015. Therefore, this comprises the population of the study. The study sample was 52 (n=52) students, this was calculated with Epi-info version 7.2.1. The expected frequency was 50%, margin error at 5% and confidence level were calculated at 80% fourth year nursing students who worked on night duty. Systemic sampling was used where all 104 students were listed, as proposed by (10), the first case was selected randomly and then every second student was selected until the sample size of 52 is reached.

Data collection

Data were collected by using self-administered questionnaires. Questionnaires were distributed and delivered by hand to the participants. The questionnaires were accompanied by a covering letter, which served to introduce and explain the study to the participants (10). The questionnaire had closed-ended questions. It was divided into three sections; section A demographic data, section B nursing students' learning opportunities on night duty and section C factors that hindered teaching during night duty.

Validity and reliability

In this study, content validity was used, whereby instrument represented all the components of the variable measured. In addition, the instrument was reviewed by nursing experts from the Ministry of Health and Social Services (MOHSS) and the study supervisors.

Reliability was ensured by administering questionnaire that consisted of similar questions and were also administered in similar manner. In addition to that, pilot study was also conducted.

Data analysis

Descriptive statistics was used to analyze study data. Data were analyzed by using statistical package for social science (SPSS). It was used to generate tables to present the findings. The frequency distribution of a variable was presented in a frequency table, which is a way of organizing the data by listing every possible value in the first column of numbers and the frequency of each value in the second column of numbers (11).

Ethical considerations

Ethical approval was granted from the Ministry of Health and Social Services research unit. The permission to conduct this study was obtained from the office of the associate dean School of Nursing as well as research unit in the MoHSS. Participation was completely voluntary and informed consent was obtained from each participant prior to completion of the questionnaire. To ensure anonymity the participants were not asked their name, they were allocated numbers in orders to identify them. Confidentiality was ensured by not sharing the information linked to the participants name with other individuals. The privacy of the participants was ensured by making sure that no one else has access to collected data except for the researcher and supervisors.

RESULTS

Description of study respondents

Table one indicates the demographic characteristics of respondents in this study. Ten (19%) were male and 42 (81%) were females. The respondents' ages' ranges between 20-40 years (mean age is 22 years, mode 21 years). The majority of respondents (92%) were age between 20-30 years. All respondents completed grade 12 prior to joining the nursing programmed (Table 1).

Nursing students' learning opportunities on night duty at Katutura Intermediate Hospital

Of the 52 respondents, 38 (73%) indicated that learning is taking place during night duty. While 14 (27%) indicates that no learning taking place during night duty. All 52 (100%) respondents in this study revealed that they are taught during night duty. The majority [32(62%)] of respondents indicated that they are taught by senior registered nurses/midwives, other categories of staff members who teach nursing students on night duty are indicated in Table 2. A total of 16 (31%) respondents indicated that a total time of teaching encounters on night shift was about 30 minutes, 6 (11%)

TABLE 1:

Demographic characteristics of study respondents

Characteristics	Study sample (n=52)	Percentage (%)
Age		
20-30 years	48	92
30-40 years	4	8
Highest education level		
Nursing diploma	0	0
Grade 12	52	100
Grade 10	0	0
Religion		
Christian	44	84.6
Non-Christian	8	15.4
Staying in University Hostel		
Yes	15	29
No	37	71

TABLE 2:

Categories of hospital staff who teach students during night duty

Categories	Respondents (n=52)	Percentages (%)
Junior Nurses/Midwives Registered	10	19
Senior Nurses/Midwives Registered	32	62
Medical Doctors	4	8
Enrolled Nurses/Midwives	6	11

indicated a total time of one hour, 4 (8%) indicated a total time of two hours and 26 (50%) were not sure of total time of teaching encounters on night duty.

A total of 26 (50%) respondents indicated that they identify their own learning opportunities on night duty, while another half indicated that hospital staff identifies learning opportunities for them. The skills learned most on night duty are medicine administration (54%) followed by report writing (22%). This is followed by turning patients in bed (8%), helping during doctor's round (8%) and observing critical ill patients (8%). The clinical learning experiences respondents gained during night duty are listed in Table 3 below.

The study respondents identified two main teaching strategies used by hospital staff members when teaching them during night duty. These are procedure demonstrations, which was chosen by 26 (50%) of respondents and direct observation of clinical skills performance, which was indicated by 22 (42%) of respondents. A total of 4 (8%) respondents indicated that they were taught using other strategies.

Factors that hindered teaching during night duty at Katutura Intermediate Hospital

The factors that hindered teaching of student nurses allocated to night duty at an Intermediate Hospital were revealed. More than half of the respondents (54%) indicated that nursing students are not taught on night duty due to staff shortage, this is followed negative teaching attitudes by registered nurses/midwives (19%) and inadequate preparation for teaching (19%). Other factors that hindered teaching on night duty are indicated in Table 4.

Furthermore, students who indicated that other factors that were not in the list hindered teaching students were given options to specify and the following factors were indicated by one student each;

- Registered nurses/midwives have limited knowledge of skills in teaching

TABLE 3:
Clinical learning experiences gained during night duty

Clinical learning experiences	Respondents (n=52)	Percentage (%)
Calculate dosages of medications	5	9.6
Monitoring of vital signs of a seriously ill patient	20	39
Formulation of nursing care plan	5	9.6
Handling emergencies at casualty or emergency department	15	28.8
Putting up intravenous infusion on emergency patient	3	
How to receive telephonic ordering	2	4
Conducting deliveries and suturing episiotomies and tears in labour ward	1	2
Delegating activities to staff members and managing time	1	2

TABLE 4:
Factors that hindered teaching during night duty at Katutura Intermediate Hospital

Factors	Respondents (n=52)	Percentage (%)
Staff Shortage	28	54
Negative of attitudes Registered nurses toward teaching	10	19
Inadequate preparation for teaching	4	8
Work overload	4	8
Inadequate equipment	0	0
Teaching not stipulated in job description	0	0
Lack of interest from students	0	0
Other factor's	6	11

- Laziness of both students and nurses
- Conflicts between training institutions and the clinical staff
- Night duty not conducive for teaching and learning
- Students from different training institutions and therefore different learning needs
- Nursing staff sleeping while on duty

DISCUSSION

Clinical placement is one of the critical components in the training of nursing students. It may be undertaken during day and night duty because hospitals provide 24 hours health care services to the patients. Although much is written about nursing services on night duty (6), it is clear there is a vast gap pertaining to learning opportunities on night duty and factors affecting teaching. Therefore, in this study, we determined the nursing students' learning opportunities on night duty at Katutura Intermediate Hospital. And also factors that hindered teaching during night duty at Katutura Intermediate Hospital.

The study revealed that learning takes place during night duty and senior registered nurses/midwives are the mainly involved in teaching the nursing students in comparison to other categories of health care workers who work with students on night duty. Registered nurses/midwives teach students more because they are not only accountable for patient care in the ward but also have a responsibility to teach students (12). Although this study revealed

that learning is taking place during night shift, previous studies indicated that students who were placed on night duty showed less satisfactory with learning that took place in comparison to learning during day shift (13). According to (14), students on night duty may be less satisfied because it is considered to be less challenging due to less hospital activities that take place during night in comparison to day shifts. However, there are other studies that are in accordance with results of this study. (15) revealed that learning takes place on night duty. This is because knowledge is gained from what is seen in different night situations and these may differ from what occurs during daytime.

According to the students sampled in this study, a total of 50% indicated that they were not sure of the total time spend by registered nurses on teaching encounters during clinical placement on night duty. As indicated by (16), a total time spend on teaching in clinical placements may be difficult to estimate because it is guided by a type of teaching opportunity identified and also on the type of skills learned. Therefore, it may be as short as five minutes and some may take up to one hour.

The study also revealed that most skills learned by students during night duty are medicine administration (54%), report writing (22%), turning patients in bed (8%), helping during doctor's round (8%) and observing critical ill patients (8%). In terms of exposure to clinical learning experiences, students revealed that they were exposed to the following during their placement to night duty; calculate dosages of medications, monitoring of vital signs of a seriously ill patient, formulation of nursing care plan, handling emergencies at casualty or emergency department, putting up intravenous infusion on emergency patient, how to receive telephonic ordering, conducting deliveries and suturing episiotomies and tears in labor ward, delegating activities to staff members and managing time. Except for delegation of activities, management of time and receiving telephonic orders, all other skills and experiences are similar to student learning activities during night shift as revealed by (13). These activities are night rounds, basic nursing care such as hygiene, vital sign assessment and clinical documentation. In contrary, (13) revealed that students also learn technical skills such as taking blood sample, which were not revealed in this study. Moreover, (5) revealed that students on night duty get exposed to complex skills such as tracheostomy suctioning, insertion of intercostal catheters, wound care, blood transfusion and electrocardiograph. However, these were not revealed in this study. Although nursing activities are limited during night shift, night duty could be conducive for teaching skills and students' exposure to clinical learning experiences because it is more peaceful, and it allows greater independence and responsibilities to the students (Bohle & Tilley, 2003).

In this study, factors revealed as hindrances to teaching during night duty are staff shortage, negative attitudes of registered nurses toward teaching, inadequate preparation for teaching, work overload and other factors. This is in accordance with Charles (2005) who also revealed the same factors as hindrance to teaching and learning opportunities on night duty. Other factors revealed in this study as hindrance to teaching on night duty may not be specific only to night duty buy may also affect clinical teaching on day duty. Except for sleeping on duty, which is a common night duty problem. According to Charles (2005), nursing students are sometimes delegated to do ward duties while the nursing staff are sleeping. This could affect teaching and learning as students are not supervised, in addition, it could also put patient at risk as nursing students are still need guidance (17).

LIMITATION

This study is to some extent constrained. This is because it only focused on fourth year nursing students, third year students were not part of this study although they were also placed on night duty. In addition, only fourth year students who worked night duty prior to data collection were included.

STUDY IMPLICATIONS

The findings of and conclusions from this study have implications related to students' learning opportunities on night duty and further research. It is revealed that shortage of nursing on night staff is a major reason why students are not taught. It is recommended that hospital management allocate more staff in units where students do night duty in order to facilitate learning. In addition, there is a need to conduct an in-service training on teaching in clinical settings for nursing staff to change their attitudes towards teaching. Moreover, the in-service training enhances their preparedness for teaching roles. This study only analyzed learning opportunities and challenges from the nursing students' perspective; it should be necessary to explore the nursing staff perspectives on teaching nursing students on night duty.

CONCLUSIONS

This study determined the nursing students' learning opportunities on night duty and factors that hindered teaching. Based on the study results, it could be concluded that learning take place during night duty and nursing students are taught by registered nurses/midwives. In addition, nursing students are capable of identifying their own learning opportunities on night duty. Furthermore, it is evident that nursing students learn some skills and are exposed to clinical learning experiences stipulated for their programmed. Nursing and medical staff are involved in teaching the students and they commonly use direct observations and demonstration of procedures. Lastly, from these results, it is seen that hindrance to teaching nursing student on night duty involves nursing staff, training institutions and health care systems.

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