

**ORIGINAL PAPER****Clinical Nurses' Satisfaction with Night Shift in Selected Hospitals in Ile-Ife, Osun State, Nigeria****Oluwasayo B. Ogunlade, RN, RM, RPHN, BNSc**

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**Abstract**

**Introduction:** Nurses as health care providers work during the night to cater for the needs of patients, and it is essential for these nurses to be satisfied with the work environment during night shift for quality nursing care.

**Objectives:** the objective of this study is to determine nurses' experiences and their satisfaction with night shift

**Methodology:** Cross-sectional design was adopted for the study. This study was conducted in two hospitals in Ile-Ife. One hundred and eighty six nurses participated in the study and data was collected using a validated questionnaire. Institutional review board approval was also obtained for the study.

**Results:** Findings showed that, 25.3% reported they usually had 2 nurses work in a 21-30 bedded ward during night shift, and majority of the nurses (83.3%) did not usually have break during night shift. However, many of the nurses (55.4%) were fairly satisfied with night shift. A significant association was found between gender and satisfaction ( $X^2 = 8.058$ ,  $df = 2$ ,  $p = 0.005$ ); and also a significant correlation was found between numbers of beds on the ward and satisfaction ( $r = 0.8$ ,  $p = 0.002$ ). Inadequate staffing and inadequate devices for protection from hazards were among other factors that contributed to their fair satisfaction with night shifts.

**Conclusion:** It is concluded that satisfaction of clinical nurses with night shift is a product of number of nurses on duty, and facilities available to work at night.

**Keywords:** Experiences, Facilities, Nightshift, Work environment

**Introduction**

Nursing as a profession, and the shift work system is considered to be as old as human history. Nursing profession has been recognized as an important component of the health care industry. Therefore, there is the need for competent and dedicated people in the profession to render qualitative care through the period of 24 hours, including the still hours of the night. Provision of qualitative nursing care can only be achieved if nurses are satisfied with their jobs irrespective of the time of the day.

Nurses as health care providers, are obliged to work during the day and night to cater for the

needs of patients (Abdalkader & Hayajneh, 2008; Taranjit Kaur & Shiva, 2012). When majority of people of the world are asleep in preparation for the challenges that a new day may bring, a nurse is awake at work administering medications, checking on a sleeping patient or handling a dire emergency. Night shifts can be challenging, in that nurses at night are often well versed in making do with the minimal available support to meet the needs as they arise. Sometimes, support services readily available in the day time are often non-existent or only on call during the night (Clayden, 2003). However, nurses have this major challenge of ensuring that quality nursing

care is provided to all patients on a 24 hour basis in healthcare facilities

In the Nigerian context, night shift is defined as work performed by nurses from 7pm or 8pm till 8am the next day. This means that a nurse on night duty in Nigeria works for 12 or 13 hours with little or no break period. Lasebikan & Oyetunde, (2012) reported from their study on burnout among nurses in Oyo State of Nigeria that too frequent night shift is a predictor of burnout among nurses studied. The report of Lasebikan & Oyetunde, (2012) also documented the increased likelihood for illness and injury among employees working in long-hour schedules, and schedules involving unconventional shift work (e.g., night and evening shifts) among which nurses are included.

Nursing as a profession has a lot of studies done on night shift but little or none has been done with their satisfaction with night shift especially in the Nigeria context. The roles performed by the nurse during night shift cannot be underestimated as activities in the night is as important to the recovery of patients as the activities that occur during the day. Nevertheless, inadequate staff, less administrative support, lack of equipments and supplies, and lack of decent place to take a break amidst a few have been documented to contribute to poor performances of nurses working at night (Chalang-Javier, 2008).

The work environment and standards that surrounds nursing practice in Nigeria is different from what applies in the diaspora, especially the developed countries. The working situations also differ with hospitals even in the same region, but nurses have learnt to adapt to these various working conditions in spite of their dissatisfaction with some of the conditions at work. Nigerian nurses can also not be exonerated from night duties because, as they are important during the day to their patients, so also are they important at night, and are also expected to deliver quality nursing care irrespective of the time of the day. Determining the experiences of nurses during night shifts and their satisfaction with the shift is paramount (Powell, 2013; Stokowski, 2013). This is to ensure that strategies are put in place to in order to improve their working condition at night and consequently improve nursing care. Therefore, this study was designed to assess the

experiences of nurses during night shift and determine their satisfaction with the shift.

### Methods

This is a descriptive cross-sectional study that was conducted in a teaching and a missionary hospital in Ile-Ife, Osun State, Nigeria.

The teaching hospital offers primary, secondary and tertiary health care services, and is renowned for rendering excellent specialist services. In addition to these, various health professional students ranging from Nursing, Medicine, Pharmacy and other Para-medicals are trained in this hospital.

The missionary hospital is also a well known secondary health care facility that provides mainly secondary and tertiary health services for clients and also serves as a teaching health facility to nursing students and a unit of resident doctors in Family Medicine. This missionary hospital is well patronised because of its strategic location and its religious inclination.

The two healthcare institutions run the three shift system of morning (8 hours), afternoon (6-7 hours), and night (12- 13 hours).

The target population for the study was a total of four hundred and sixty (460) nurses, both males and females in various cadres, working in these hospitals as at the time the study was conducted. Purposive sampling technique was used to select the nurses that participated in the study. The sample inclusion criterion was nurses who were working shift schedule with the exclusion criteria of nurses fixed at morning shifts such as head nurses and those in outpatient departments and clinics. The sample was spread across the various wards where nurses run shifts with a sample size of 200 nurses for the study. However, only 186 questionnaires were adequately filled giving a response rate of 93%.

A validated questionnaire constructed from literature review with Cronbach's Alpha of 0.8 was used to collect data. The instrument was divided into 3 sections. The first section contained 8 questions and assessed the nurses' demographics. The second section contained 13 questions that assessed nurses' experiences with night shift, while the third section contained eleven, 4 point-Likert scale of: Not Satisfied (1), Fairly Satisfied (2), Satisfied (3), Very Satisfied (4) that assessed satisfaction with night shift.

The total obtainable score for satisfaction was 44.

Data Analysis was carried out using the Statistical Package for Social Sciences (SPSS), version 16. Overall grouping of satisfaction was carried out in percentages hence, the first 25% (1-11) was termed to be not satisfied, the next 50% (12-22) was termed fairly satisfied, the next 75% (23-33) was termed to be satisfied while the last 100% (34-44) was termed very satisfied.

Before the commencement of the study, ethical clearance for the study was received from the Research and Ethics Committee of the Obafemi Awolowo University Teaching Hospitals Complex, while written informed consent was also received from the subjects.

## Results

The Demographic characteristics of the nurses showed that there is still preponderance of females (83.3%) and Diploma certificate holders (86.6%) in the nursing profession. Other characteristics of the nurses are presented in Table 1.

Assessing the experiences of the nurses during night shift, 47 (25.3%) reported they usually had 2 nurses working in a 21-30 bedded ward during night shift, while 26 (14.0%) reported 1 nurse on night duty in a 11-20 bedded ward (Fig 1).

An overwhelming majority (97.3%) of respondents stated that they went on night shift at least once a month, 2.2% went on night shift twice a month, while only 0.5% went on night shift once in three months. A higher percentage of the nurses (97.3%) reported they usually went on 7 days consecutive night shift with corresponding 7 days off duty.

The study also revealed that majority of the nurses (83.3%) did not usually have break during night shift, but 16.1% reported they sometimes had break, and only 0.5% always had break while on night shift. Findings from the study further revealed that 82.3% had no rest rooms where they can relax during night shift while a majority (97.3%) reported they never had refreshments supplied to them during night shifts. The frequency of supplies during night shift is presented in table 2.

## Satisfaction with night shifts

The mean satisfaction obtained was  $22.5 \pm 4.9$ . The median satisfaction score was 22 with h-spread of 23 while the minimum and maximum scores were 13 and 40 respectively.

However, the maximum score was an outlier (Figure 2). The findings from satisfaction by the facilities available at night showed that very few nurses were very satisfied with all the variables assessed (Table 3). However, 45.7% were satisfied with supervision by unit heads, while 57.0% and 48.9% were never satisfied with availability of devices for protection from hazard, and number of nurses on night shift respectively.

Overall, 55.4% were not satisfied with night shifts, while 44.6% were satisfied with night shifts. A significant association was found between gender and satisfaction (table 4, 8,  $df = 2$ ,  $P = 0.005$ ); and also a significant correlation was found between numbers of beds on the ward and satisfaction (table 5  $r = 0.8$ ,  $p = 0.002$ ). In figure 2 a Box plot of scores for the subjects satisfaction with night shift is presented, while in figure 3 the overall satisfaction of the subjects with night shift is presented.

## Discussion

### Demographics

Night shift duty has long been recognized as anti physiology to human hood, and having a devastating effect on the health of the individuals involved in such duty (Lasebikan & Oyetunde, (2012).

Nurses cannot exonerate themselves from night duty because the care of in-patients and emergency health services are occurrences of all hours of day and night. The study affirms the fact that majority of the nurses in this study were females and are married (table 1) as found in other studies (Ulrich, 2010; Gaki, Kontodimopoulos & Niakas, 2012).

Hence, marital responsibilities and motherhood will compete with their night duty as many mothers and wives will not see their spouses and children during the period of night duty (Simunic & Gregov, 2012; Dunifon et al., 2013).

**Table 1: Socio- demographic characteristics of respondents**

Characteristics	n	(%)
<b>GENDER</b>		
Male	31	16.7
Female	155	83.3
<b>AGE Mean = 37.7 (<math>\pm</math> 9.3) years</b>		
18-40	118	63.4
41-65	68	36.6
<b>MARITAL STATUS</b>		
Single	47	25.3
Married	137	73.7
Separated	1	0.5
Widowed	1	0.5
<b>PROFESSIONAL QUALIFICATIONS</b>		
Registered Nurse	25	13.4
Registered Nurse/ Registered Midwife	93	50.0
Registered Nurse/Other qualifications	25	13.4
Registered Nurse/ Registered Midwife/Other qualifications	43	23.1
<b>EDUCATIONAL QUALIFICATIONS</b>		
Diploma	161	86.6
BA/BNSc	21	11.3
MA/MSc	4	2.2
<b>PROFESSIONAL DESIGNATION</b>		
Nursing Officer II	34	18.3
Nursing Officer I	61	32.8
Senior Nursing Officer	20	10.8
Principal Nursing Officer	15	8.1
Assistant Chief Nursing Officer	2	1.1
Chief Nursing Officer	31	16.7
Assistant Director of Nursing Services	23	12.4
<b>WARD/UNIT</b>		
Male Ward	34	18.3
Female Ward	35	18.8
Paediatrics	27	14.5
Maternity	31	16.7
Orthopaedics	14	7.5
Intensive Care	9	4.8
Renal	7	3.8
Accident & Emergency	14	7.5
Psychiatry	8	4.3
Theatre	7	3.8
<b>Experience Mean = 12.6 (<math>\pm</math>9.6) years</b>		
<10	101	54.3
11-20	46	24.7
21-30	30	16.1
>30	9	4.8

**Table 2: Responses on frequency of supply of facilities during night shift**

Facilities/items	Always	Sometimes	Never
	f(%)	f(%)	f(%)
Electricity	94(50.5)	92 (49.5)	--
Water	47(25.3)	119(64.0)	20 (10.8)
Emergency drugs	57(30.6)	104(55.9)	25 (13.4)
Support staffs e.g. ward orderlies, porters.	76(40.9)	95(51.1)	15 (8.1)

**Table 3: Satisfaction with night shift according to the facilities available at night**

ISSUES	VERY SATISFIED	SATISFIED	FAIRLY SATISFIED	NOT SATISFIED
	f(%)	f(%)	f(%)	f (%)
Physical work Environment	3(1.6)	46(24.7)	106 (57.0)	31(16.7)
Availability of instrument and supplies	3(1.6)	33(17.7)	110(59.1)	40(21.5)
Availability of devices for protection from hazard	1(0.5)	17(9.1)	62(33.3)	106(57.0)
Adequate lighting	9(4.8)	52(28.0)	92(49.5)	33(17.7)
Availability of support staff e.g cleaners and porters	6(3.2)	40(21.5)	87(46.8)	53(28.5)
Security services	7(3.8)	46(24.7)	76(40.9)	57(30.6)
Supervision by Unit heads	16(8.6)	85(45.7)	69(37.1)	16(8.6)
Number of nurses on duty during night shifts	2(1.1)	27(14.5)	66(35.5)	91(48.9)
Supply of electricity	12(6.5)	52(28.0)	95(51.1)	27(14.5)
Supply of water	7(3.8)	39(21.0)	81(43.5)	59(31.7)
Emergency drugs supply	7(3.8)	54(29.0)	84(45.2)	41(22.0)

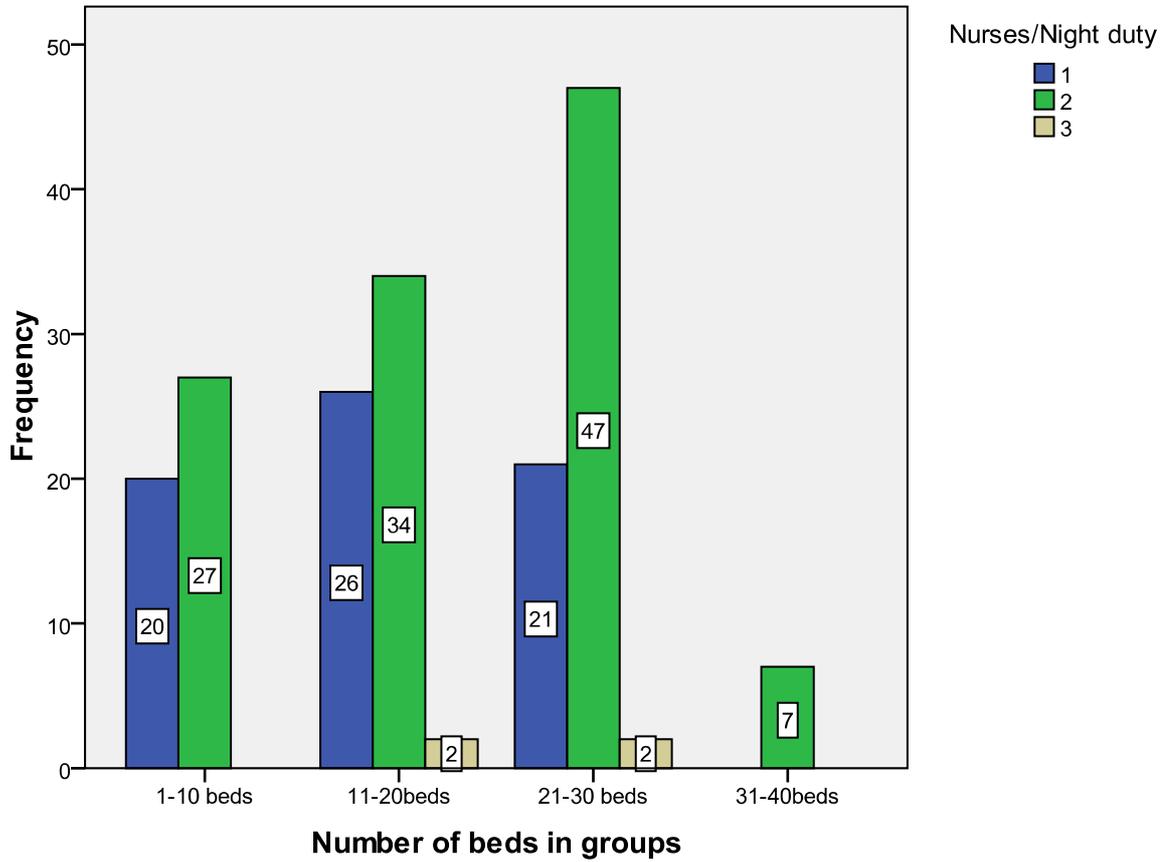
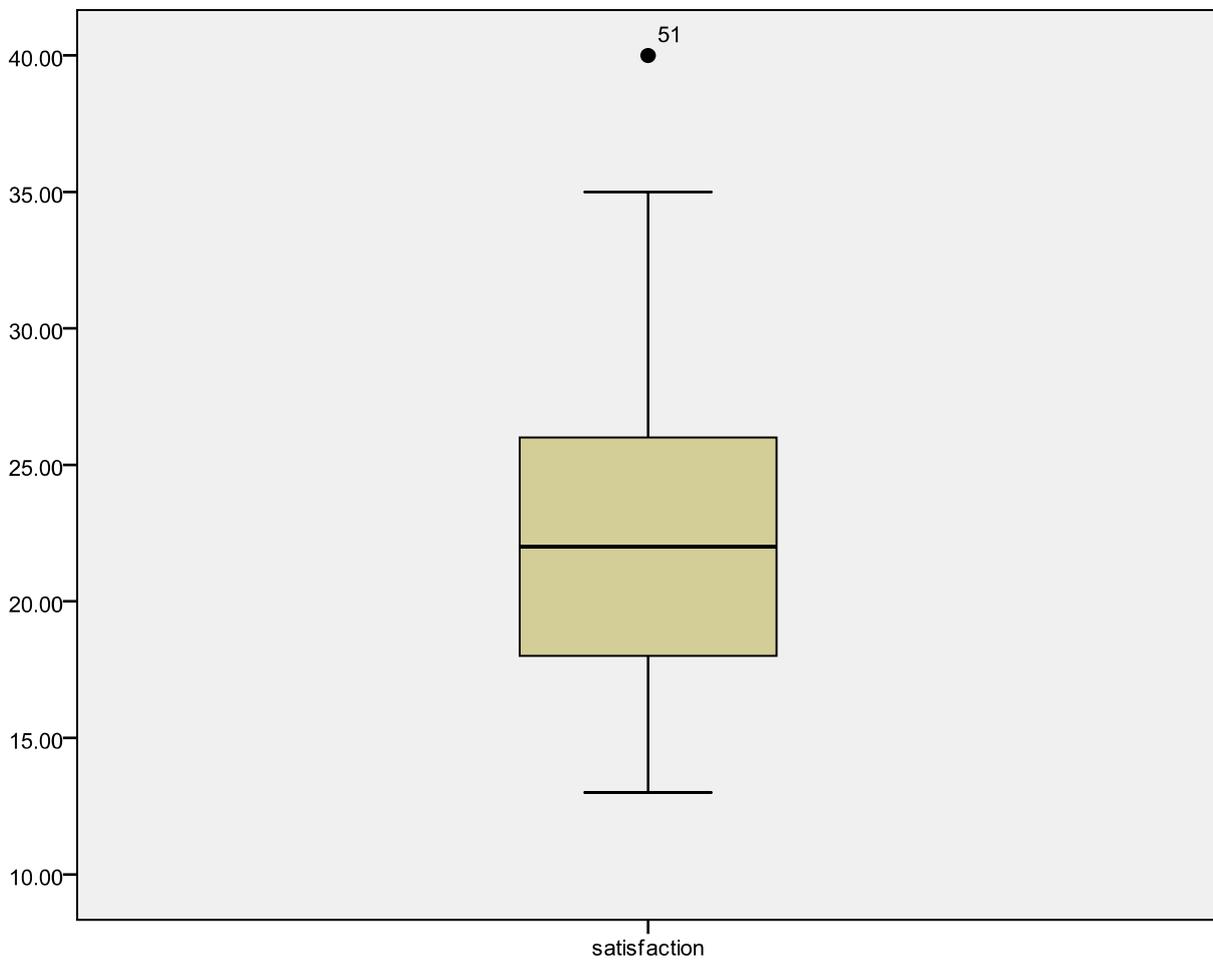


Figure 1: Responses on Number of Nurses on Night Duty per Number of Beds in a Ward



**Figure 2: Box plot of scores for satisfaction with night shift**

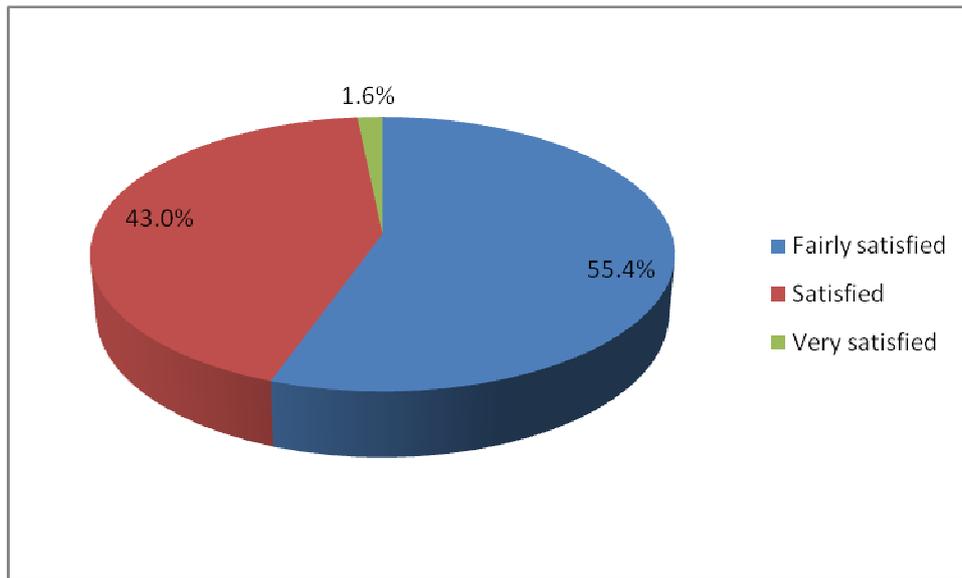


Figure 3: Overall satisfaction with night shift

Table 4: Distribution of Respondents Satisfaction According to Gender

Satisfaction	Gender		Total
	Male	Female	
Fairly satisfied	10	93	103
Satisfied	20	60	80
Very satisfied	1	2	3
Total	31	155	186

$X^2 = 8.058, df=2, p<0.05$

Table 5: Distribution of respondents' satisfaction according to the number of beds in the wards

Satisfaction	Number of beds in a ward in groups				Total
	1-10 beds	11-20 beds	21-30 beds	31-40 beds	
Fairly satisfied	25	37	37	4	103
Satisfied	21	23	33	3	80
Very satisfied	1	2	0	0	3
Total	47	62	70	7	186

$r = 0.8, p < 0.05$

It is paramount that if a woman is undergoing emotional trauma for not having such intimacy with her family members during night shift, it is also essential that such a nurse feel satisfied with night shift working condition so that she will not be overwhelmed on both sides.

### Experiences

The World Health Organisation (W.H.O) stipulates a one nurse to six patients' ratio. This is not adhered to in the study settings (figure 1). The number of nurses on night duty for wards with 11-40 beds showed that this W.H.O policy was not adhered to and this might explain why there is a correlation between number of beds and satisfaction with night shift in this study. According to Josephson et al, (2008), general shortage of nurses is a public health issue in many countries.

Empirical facts have it that nurse-patient ratio affects patients' quality care and outcome (Ball & Pike, 2009). If nurses are to deliver quality care, they should be assigned to the number of patients that they can care for, usually 5 patients most especially during night shift depending on the unit where they work and the severity of the condition of the patients. The findings from this study that showed the majority (97.3%) of these nurses usually went on night shift at least once a month is worthy of note. Night shift duty should not be this frequent as it has been linked with health conditions like breast cancer and insomnia among others (Peplonska, 2012).

The health of the nurses who strive to improve the health of others should also be maintained and improved if they are to give their best to nursing care. Health institutions should have enough nursing staff that can be rotated across night shift at a very long interval probably every 3 months. This is to ensure that the body's circadian rhythm is readjusted effectively within a period of 3 months of night shift interval.

It is interesting to note that a majority (83.3%) usually did not have break during night shift and they were never served any refreshment during shift. This can be attributed to the reports of a majority of the nurses (82.3%) that they did not have restrooms where they can relax during break time or have refreshment during. In a study conducted by Fallis, McMillan, and Edwards (2011) in Canada, they documented that 'restorative napping' which was defined as

a purposeful, brief sleep period was identified by nurses as a potential strategy to improve performance, safety and personal health.

The labour law in Nigeria (Nigeria labour Act, 1974) affirms that every employer must make provision for period of break time and relaxation facility for their employees. Nursing job is a very tedious one that requires that every nurse must be given the opportunity to relax for a few periods and this will consequently serve as catalyst to being satisfied on the job. It should be noted that having facilities to work with and having good condition of work is paramount for improved quality of nursing care. The frequency of supply of essential facilities and supplies (table 2) in this study is worrisome. Many of the listed items such as electricity, water, emergency drugs and support staff are very essential for quality nursing care. Continuous supply of water is paramount to prevention of nosocomial infection (Samuel et al., 2010), while non-availability of emergency drugs during night shift is dangerous to the health of the patients. In addition, the stressful nature of nursing job requires that support staff is always available while electricity supply is constant if there is need to transfer a patient during admission or for special investigation.

### Satisfaction with night shift

Satisfaction is a concept that applies to every situation in life including job performances. Satisfaction of nurses with night shift is a precursor to quality nursing care. The findings from this study are an eye-opener to the working condition of nurses in the settings under study. Those that reported to be fairly satisfied are as good as not being satisfied. For example, 57% of the nurses reported that they were fairly satisfied with the physical work environment of their hospital. In a study conducted by Ajayi et al., (2008) among nurses in Ahmadu Bello University Teaching Hospital on job satisfaction, it was also reported that most of the nurses (43.7%) were fairly satisfied with their physical work environment. The work environment is paramount in promoting job satisfaction in any establishment (Hertzberg et al., 1959 in Ajayi et al., 2008). Stakeholders in hospital management should ensure that the physical work environment is improved to an extent that nurses and other health workers will find it satisfying for the delivery of quality services.

In any work environment, protection from hazards and provision of security services is essential. Occupational health policy dictates that each employer should ensure the health and safety of their employees at the work place (WorkSafeBC, 2008). Anecdotal reports of armed robbery attack on nurses and patients in some hospitals in Nigeria during night shift has generated the need to ensure safety of lives of nurses on duty. A good and safe physical work environment does not exonerated nurses. Nurses need such environment to perform at their maximum capacity and this ultimately promotes job satisfaction among them even during night shift.

Developing countries such as Nigeria have over the years witnessed irregular electricity supply and this has severely affected productivity at the local and national level. However, many organizations have tried to make alternative arrangements for power supply including hospitals. The findings from this study have shown that alternative arrangement for electricity supply for settings in this study is not

at its maximum. Some of the gadgets that nurses work with such as suctioning machine, cardiac monitor among others requires electricity supply for their functioning. Therefore, a nurse who needs to use some of these gadgets at night and could not get them to use will not be able to deliver quality care and this will subsequently reduce her satisfaction to the job. In addition, an environment that is not well lit will be an opportunity for miscreants to carry out their evil acts. Provision of adequate supply of electricity is needed for nurses' satisfaction with night duty.

The overall assessment of nurses' satisfaction with night shift in this study, that revealed only 1.6% of them to be very satisfied with night shift calls for concern in the health care industry. It would have been expected that sizeable number will be very satisfied however, a majority (55.4%) were fairly satisfied. These is contrary to the reports of Ajayi et al., (2008) in their study on job satisfaction among nurses when they found out that a majority of the nurses (49%) were not satisfied with night shift. Many of the findings from this study on satisfaction with night shift has supported the work of Chalang-Javier (2008) where she discovered that that night nurses are faced with the challenges of inadequate staff, lack of equipments and

supplies, and lack of a decent place to take a break.

The significant associations between gender, number of beds, and satisfaction in this study are important baseline findings. A large scale study is necessary to authenticate the findings as the associations between the variables are essential to improve satisfaction of nurses with night shift.

### **Implications for nursing Practice**

The International Council of Nurses (ICN) recognizes that many health care providers' services are accessible on a 24 hour basis, making the night shift a necessity for nurses working in hospitals with in patients. For effective and efficient nursing practice at night the nurse should be satisfied with the physical working environment. Security is paramount and adequate devices for protection from hazard are also very essential. Adequate staffing is important to meet the minimum nurse – patient ratio for patients' safety. Break for nurses at night refreshes and make this group of care givers more alert. It is essential to institute break within the twelve hours period of working on night duty. As much as possible there should be decent and very comfortable places to take the break for the purpose to be achieved.

### **Conclusions**

The study concluded that nurses in the selected hospitals were fairly satisfied with night shift and satisfaction of with night shift is a product of number of nurses on duty, and facilities available to work at night.

### **Recommendations**

- The management of the selected hospitals should employ more nurses to increase the strength of the nursing staff in order to meet the minimum nurse-patient ratio.
- Time should be allotted for break during the night and decent places should be made available where nurses can have such.
- There should also be facilities where refreshments can be taken while on night duty.
- Water, Emergency drugs and support staffs should always available during all the shifts for efficiency.

- The physical work environment should be conducive with adequate security and adequate protection from all hazards.
- Further researches can explore ways nurses can be motivated while on night shift, and evaluate how their satisfaction affects their attitude to work during the night.

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