



Assessment of occupational related stress among nurses in two selected hospitals in a city southwestern Nigeria

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ABSTRACT

This study assessed frequency of stressful event among nurses and how stressful they perceived those events to be.

This descriptive design study was carried out among nurses in two selected hospitals. In all 183 nurses recruited using simple random sampling participated in the study. Ethical clearance was obtained from appropriate IRB. The instrument used for data collection was the Nursing Stress Scale. Descriptive and inferential statistics were used for data analysis.

Most frequently stressful aspect of nurses work include; inadequate staff to cover ward work load (2.55); performing procedures that patients experience as painful (2.30); and lack of drugs and equipment required for nursing care (2.30). On the overall, workload was the most frequently stressful aspect of nurses' work followed by death and dying. Three most stressful aspect of nurses' work was observed to be, not having enough staff to adequately cover the load of the ward (3.72); lack of drugs and equipment required for nursing care (3.45); and death of patient with whom you develop a close relationship (3.43). No significance difference was observed in the level of stress experienced by nurses in the two hospital (99.35 vs 93.27; $t = 1.492$, $p = 0.137$). Also, in the level of stress experience by the junior and the senior nurses (99.76 vs 95.41; $t = 1.127$; $p = 0.261$).

In conclusion, nurses are susceptible to occupational stress because of intense daily activity. Nurses are not ever thought as needing help but only as the care givers.

1. Introduction

Nursing is a stressful profession (Adib-Hajbaghery, Khamechian, & Alavi, 2012; Oxtoby, 2015). It is a job that requires expenditure of energy on many levels. Physically, the job can be demanding with high levels of muscular-skeletal stress, culminating in many aches and pains. Mentally, nurses are required to be alert, making calculations for medication and responding to important questions from patients and relatives. Emotionally, the impact is felt when they empathize and help people, and from the toll of working in an environment where there is pain and sadness. The nurses' work environment is often characterized by resource constraints, poor staff support and organizational change, which add to the energy expended (Gómez-Urquiza et al., 2017; Halpin, Terry, & Curzio, 2017; Casu & Giaquinto, 2018).

Nurses are the backbone of the health industry. According to Ogundipe, Obinna, and Olawale (2015), they develop closer relationship with the patient more than any other healthcare personnel and are crucial to the smooth running of any hospital. This enormity of work that nurses have to contend with results in stress which is a major cause

of concern for many nurses at work (Ogundipe, Obinna, & Olawale, 2015).

Occupational stress results in considerable costs to organizations in terms of absenteeism, attrition rate, injury claims, infection rates, errors in treating patient, reduced productivity, and health care resources (Nakasis & Ouzouni, 2008; Hanson, Onasoga, & Babalola, 2017). Reduced productivity in turn can lead to increased staff conflicts, recruitment and retention problems, burnout, absenteeism, litigation and rapid turn-over, and inadequate job satisfaction (Labrague et al., 2016). It has also been reported to cause significant monetary costs to the National Health Service [NHS] Trusts in the UK (Azagba & Sharaf, 2011). Occupational stress has been defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the resources, capabilities and needs of the worker (Nakasis & Ouzouni, 2008). Inadequate resources, capabilities and low nurse to patient ration in nursing profession is known to be stressful throughout the world and has detrimental effects on the physical and psychological wellbeing of nurses.

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(2017) revealed that challenges faced by the nurses are due to unbalance between needed environmental motivation to work and the heavy workload. Despite this, they are expected to provide holistic and good quality care to the patient. The authors observed patients remain under the risk of prolonged illness which has been associated with poor quality of care provided by stressed individual nurses (Hallin & Danielson, 2007).

2. Consequences of stress among nurses

Although nursing is a rewarding profession, but at the same time it can also be very stressful (Bhatia, Kishore, Anand, & Jiloha, 2010). Occupational stress has been reported to result in a significant monetary cost for health care systems (Azagba & Sharaf, 2011). This is due to lack of productivity as a result of staff conflicts, health care consumption, recruitment and retention problems, burnout, absenteeism, litigation, and rapid turnover. The World Health Organization (WHO, 2002) estimates the cost of stress and stress related problems to organizations to be in excess of \$150 billion annually. In the United States alone, the cost of stress had increased to US\$350 billion (about £220 billion) per year (Azagba & Sharaf, 2011). Data from the European Union show that the cost of stress calculated at 20 billion euro (about £16.5 billion) each year (Azagba & Sharaf, 2011). It is estimated that work-related stress costs UK industry around £6.7 billion each year in lost income (Health and Safety Executive, 2011), and caused workers to lose 10.8 million working days in 2010/11 (Health and Safety Executive, 2011). Stress related cost, including absenteeism, costing the Australian economy AU\$14.81 billion (about £9.56 billion) a year, and directly costing employers AU\$10.11 (about £6.98 billion) billion a year with total of 3.2 days per worker lost per year (Medibank Private, 2008 cited in Naqvi, Khan, Kant, & Khan, 2013). No statistics are available about the monetary cost of occupational stress in Nigeria and many developing nations of the world.

3. Predisposing factors to stress among nurses

Various individual, social, environmental and organizational factors have been associated with high level of occupational stress among nurses. Halpin, Terry, and Curzio (2017) (2008) found out excessive workload was the most frequently cited source of workplace stress among nurses in during transition period. This was as result of the nursing shortage with fewer nurses to care for numerous patients (Li & Lambert, 2008). Furthermore, work load, shift work, overtime, and covering for absent colleagues were the most common identified stressors by other researchers (Naholi, Nosek, & Somayaji, 2015; Dall'Ora, Griffiths, Ball, Simon, & Aiken, 2015).

The work environment and institutional settings themselves have been associated with occupational stress. Nwozichi and Ojewole (2015) observed that, in addition to stressful factors intrinsic to nursing, organizational and management attributes influenced work-related stress among oncology nurses in selected teaching hospitals in South-west Nigeria. Lack of participation by nurses in decision-making, poor communication within the organisation and lack of family-friendly policies all form part of the management style influencing stress among nurses (Gibbens, 2007). The conditions found in the hospital environment can be unpleasant or may threaten the physical well-being of nurses. According to Gibbens (2007) conditions such as poor physical working conditions, overcrowding of wards, noise, lack of proper ventilation, air pollution, reduced lighting, poor ergonomics and inflexible or unpredictable hours have been recorded as contributory factors.

Research has shown that salary, fringe benefits and personal policies or regulations are constantly resulting in dissatisfaction amongst nurses and consequently increase their levels of perceived stress. Working with difficult patients, the nurses' feelings about death and dying, interpersonal conflicts, managing the patients' pain and the presence of the

family also contribute to occupational stress (McGrath, Reid, & Boore, 2003).

In addition, professional issues have been reported to lead to stress among nurses. For example, Evans (2002), in a Yorkshire, UK study exploring the district nurses' perception of occupational stress, found that job image and reward systems were among the six major stress factors for the nurses. Similarly, public health nurses in Taipei, Taiwan reported that lack of recognition in the workplace was a significant stressor among nurses. Stacciarini and Troccoli (2004) in their study of occupational stress, job satisfaction and state of health in Brazilian nurses, reported that lack of recognition, lack of status of the nursing profession, lack of autonomy, low salaries, lack of resources, and assignments outside the individual's specialty were sources of stress for nurses.

Ethical conflicts are another factor that had been identified as sources of job related stress and anxiety (Begat, Ellefsen, & Severinsson, 2005). According to Begat and colleagues, ethical dilemmas arise because of nurses' values and desires to provide high-quality care. This is in agreement with McGrath et al. (2003) findings that too little time to perform duties to one's satisfaction and rationing of resources and services resulted in moderate to high stress.

In providing essential services and health care support, the average nurse's daily workload to meet up with the clinical requirements of patients is enormous (Ogundipe, Obinna, & Olawale, 2015). In a resource challenged country like Nigeria, there is an acute shortfall of nurses. The Human Resources Information System (HRIS) Quality data from the Nursing and Midwifery Council of Nigeria revealed there are far fewer nurses and midwives available than expected to provide much-needed health services to Nigerians (Obinna, 2012). According to Natukunda (2008) Nigeria has less than 150,000 registered nurses to cater for an estimated 160 million population, giving an average nurse population ratio of 1 to 1066 people. This nurse-patient ratio is reported to be above the 1:2 or 1:5 recommended by the World Health Organization for fatal complications and common illnesses respectively (Natukunda, 2008) which increased stress level experienced by Nigerian nurses (Ojoatre, 2008). Worst still, Nigeria's population is estimated as 195,606,286 in 2018 with an estimated population of nurses to be 248,553 with deficit of 89,846 (26.55%) nurses that is expected to increase to 29.25% in 2030 if the ugly trend is not abated (Adebayo, Labiran, Emerenini, & Omoruyi, 2016).

Lastly, factors such as low skill discretions, high job demands, low support from supervisors, organizational conditions among others were recognized to have significance to occupational stress. Also, repeated challenges with patients' needs, problems suffering and death were also recognized as contributing factors (O'Shea & Kelly, 2007; Nwozichi & Ojewole, 2015). All the above discussed causes and effects of stress among nurses have raised concerned among (Verhaeghe, Vlerick, De Backer, Van Maele, & Gemmel, 2008; Wang, Kong, & A. and Ying Chair, S., 2009; Kwak, Yae Chung, Xu, & Eun-Jung, 2010; Kravits, McAllister-Black, Grant, & Kirk, 2010; Lewis, Yarker, Donaldson-Feilder, Flaxman, & Munir, 2010; & Pisanti, Van der Doef, Maes, Lazzari, & Bertini, 2011). Ardekani et al. (2008) concluded that the nursing profession in general is increasingly characterized by job stress. At present, there are scanty data about the prevalence of occupational stress among nurses in African countries or in Nigeria in particular. There is, therefore, a need to understand the predictors of occupational stress among nurses working in Nigerian hospitals especially in many states in southwestern Nigeria where there is increased patient/client hospital flow as a result of the free health policy of the government.

4. Objective

This study is designed to assess frequency of stressful event among nurses and how stressful they perceived those events to be.

5. Methodology

A descriptive design was adopted in the research study to assess occupational stress among Nurses in selected Hospitals in a city south west Nigeria. The study was conducted among nurses in two specialist hospital in a city southwest Nigeria.

Using Taro Yamane’s formula for calculating sample size a total number of 183 nurses were recruited using multistage sampling technique. Stage 1: sample frame of the nurses in each hospital was determined using the nurses’ roster list in each of the ward/unit in each hospital. Stage 2: Proportionate random selection was employed to select the number of nurses from each hospital distributed across the cadres of nursing profession. In the two hospitals where this study was carried out, the proportion of nurses recruited in each of the hospital was made to be proportional to the number they contribute to the total population of nurses in the two hospitals. This was also done in each of the wards and units in each hospital. This range from junior nurses to senior nursing cadre. Data was collected using a self-administered Nursing Stress Scale (NSS) adapted from Gray-Toft and Anderson (1981). The scale elicited the frequency to which respondents perceived themselves to be exposed to stressors pertaining to the clinical environment. The Nursing Stress Scale elicited numerical data through a Likert scale. Each item is scored according to the frequency with which these situations are assessed as stressful, from (1) never, (2) occasionally, and (3) often frequently. With this 35 NSS item, the total obtainable score range from 35 to 105. The higher the score obtained, the greater the frequency of work stressors experienced by the participant. How stressful the events were was assessed on a 5-point Likert scale of (1) not at all stressful, (2) slightly stressful, (3) moderately stressful, (4) very stressful, and (5) extremely stressful.

Although the Nursing Stress Scale has demonstrated validity in the measurement of stress (Pinikahana & Happell, 2004). Its content and face validity was further done by giving it to experts in nursing and occupational health fields. The reliability of the questionnaire was ascertained using test re-test method of reliability check. Copies of the questionnaire were administered twice on 20 nurses in a government owned hospital. Their response was correlated using Spearman rank correlation which yields a coefficient of 0.81. The questionnaire was therefore adjudged reliable. Ethical approval was sought and gained from the Health Research Ethics Committee (HREC) of Institute of Public Health, Obafemi Awolowo University, Ile-Ife, Nigeria with approval number IPHOAU/12/525. Data was collected from June 1st to August 26th 2016. Data was collected using self-administered structured questionnaires; the questionnaires were administered by two of the authors who are nurses. Questionnaires were administered to the nurses in their wards and unit. They were given a period of one week to fill and return to the ward head and filled questionnaires were later collected from the ward leaders. Questionnaires retrieved were sorted and only satisfactorily filled questionnaires were coded and analysed.

Data collected was analyzed using statistical package for social sciences (SPSS) version 20. Descriptive statistics of frequency table and mean was used to present frequency of stress and how stressful the events were among the participants. Student’s t-test was used to compare mean stress level among the nurses in the two hospitals that participated in the study and also between junior and senior nurses in the study.

6. Results

Results from the table showed that 86.9% were female and 75.4% married. Academic qualification of the respondents showed that 44.3% were registered nurse midwife while only 2.2% had PhD. Rank of the nurses that participated in the study showed that 24.6% and 30.6% were junior nurses (Nursing officer I (NOI and nursing officer II (NOII) respectively while 3.3% were senior officers (Assistant Director of Nursing Services (ADNS). Religion affiliation of the respondents

Table 1
Frequency of Stressful Events Experienced by Nurses (Range 1 to 3 with 1 implying never frequent and 3 often frequent).

	Mean score
Not enough staff to adequately cover the load of the ward/unit	2.55
Performing procedures that patients experience as painful	2.30
Lack of drugs and equipment required for nursing care	2.30
Breakdown of hospital communication process	2.25
The death of a patient	2.16
Unpredictable staffing and scheduling	2.14
A physician not been present in medical emergency	2.11
Feeling helpless in case of patients who fails to improve	2.08
Too many non-nursing tasks required such as clerical work	2.07
Lack of an opportunity to talk openly with other unit personnel about problems on the unit	2.06
Making a decision concerning a patient when the physician is unavailable	2.04
The death of patient with whom you develop a close relationship	2.03
Physician not being present when patients dies	2.02
Being asked a question by a patient for which I do not have satisfactory answer	1.98
Criticism by physician	1.97
Not enough time to complete all my nursing tasks	1.96
Not enough time to provide emotional support to a patient	1.92
Uncertainty regarding the operation and functioning of specialized equipment	1.92
Inadequate information from a physician regarding the medical condition of a patient	1.91
Floating to other units that are short-staffed	1.91
Difficulty in working with a particular nurse (nurses) within the ward	1.89
Feeling inadequately prepared to help with the emotional needs of patient’s family	1.88
Lack of an opportunity to express to other personnel in the ward/unit my negative feelings towards patient	1.88
Disagreement concerning the treatment of a patient	1.87
Lack of an opportunity to share experiences and feelings with other personnel in the ward/unit	1.86
A physician ordering what appears to be inappropriate treatment for a patient	1.80
Feeling inadequately prepared to help with the emotional needs of a patient	1.79
Fear of making a mistake in treating a patient	1.77
Difficulty in working with a particular nurse (or nurse) on the unit	1.77
Conflict with physician	1.76
Listening or talking to a patients about his/her approaching death	1.75
Criticism by a superior	1.75
Watching a patient suffer	1.68
Conflict with supervisor	1.61
Not knowing what a patient or a patient’s condition and its treatment	1.54

Source: Field Work.

revealed 85.8% Christians while 13.1% Muslims.

Results as shown in Table 1 present frequency of stressful events as conceived by the nurses that participated in this study in the past month. The ten most frequency stressful aspect work of nurses that participated in this study include: inadequate staff to cover ward work load (2.55); performing procedures that patients experience as painful (2.30); lack of drugs and equipment required for nursing care (2.30); breakdown of hospital communication process (2.25); the death of a patient (2.16); unpredictable staffing and scheduling (2.14); physician not been present in medical emergency (2.11); feeling helpless in case of patients who fails to improve (2.08); too many non-nursing tasks required such as clerical work; and lack of an opportunity to talk openly with other unit personnel about problems on the unit (2.06).

On the other hand the ten least frequently stressful aspect of work of nurses that participated in this study include: not knowing what a patient or a patient’s condition and its treatment (1.54); conflict with superior (1.61); watching a patient suffer (1.68); criticism by a superior (1.75); listening or talking to a patients about his/her approaching death (1.75); conflict with physician (1.76); difficulty in working with a

Table 2
How Frequently Stressful Are across the different factors examined.

Factors	Mean score	Number of items in each factor divided in order to compare factor
Factor i: Workload	12.88	2.15
Factor ii: death and dying	14.03	2.00
Factor iv: lack of staff support	5.80	1.93
Factor iii: inadequate preparation	5.65	1.88
Factor vi: conflict with physician	9.41	1.88
Factor v: uncertainty concerning treatment	9.27	1.85
Factor vii: conflict with other nurses	8.92	1.78

Source: Field Work.

particular nurse (or nurses) on the unit (1.77); fear of making a mistake in treating a patient (1.77); feeling inadequately prepared to help with the emotional needs of a patient (1.79); and physician ordering what appears to be inappropriate treatment for a patient (1.80).

How frequent stressful events are across the seven (7) different factors of workload; death and dying; lack of staff support; inadequate preparation; conflict with physician; uncertainty concerning treatment; and conflict with other nurses shows that the most frequently stressful aspect of nurses' work was observed to be workload, followed by death and dying while least was conflict other nurses (Table 2).

Table 3 present how stressful certain aspects of work of nurses that participated in this study are, results from the table showed that the ten most stressful aspect are: not enough staff to adequately cover the load of the ward (3.72); lack of drugs and equipment required for nursing care (3.45); death of patient with whom you develop a close relationship (3.43); the death of a patient (3.37); breakdown of communication process (3.08); unpredictable staffing and scheduling (3.06); feeling helpless in case of patients who fail to improve (3.03); physician not been present in medical emergency (3.03); physician not being present when patients dies (2.93); and too many non-nursing tasks required such as clerical work (2.91).

Similarly, the ten least stressful aspects of nurse's work among respondents that participated in this study include: fear of making a mistake in treating a patient (2.32); conflict with supervisor (2.32); not knowing what a patient or a patient's condition and its treatment (2.36); lack of an opportunity to share experiences and feelings with other personnel in ward (2.37); making a decision concerning a patient when the physician is unavailable (2.40); listening or talking to a patients about his/her approaching death (2.41); difficulty in working with a particular nurse (or nurses) on the unit (2.49); criticism by a superior (2.50); feeling inadequately prepared to help with the emotional needs of a patient (2.50); and disagreement concerning the treatment of a patient. The most stressful aspect of nurses work is workload (3.05), closely followed by death and dying (2.95) while the least stressful was lack of staff support (table 4).

Results also showed that there is no significant difference in the level of stress experience by nurses in the two hospitals (99.35 vs 93.27; $t = 1.492$, $p = 0.137$). Also, there is no significant difference in the level of stress experience by junior and senior nurses in the study population (99.76 vs 95.41; $t = 1.127$; $p = 0.261$) (Tables 5 and 6).

7. Discussion of findings

This research was carried out among nurses working in two selected hospitals in a city in southwest Nigeria. In all 183 nurses participated in the study. The socio-demographic data shows that four fifth of the nurses were female; this confirms the female dominance of nursing profession. Considering their rank, about one third of the nurses that participated in the survey were Nursing Officer I, which is an indication that there are more junior nurses, and most likely with little experiences in the hospitals where this study was conducted. This might have serious implication on the quality of care they can render and their management of stressful activities or experiences. Also, the Christians

Table 3
How Stressful Certain aspect of Nurses' Work are (On a scale of 1 to 5; 1 not at all stressful and 5 extremely stressful).

	Mean score
Not enough staff to adequately cover the load of the ward/unit	3.72
Lack of drugs and equipment required for nursing care	3.45
The death of patient with whom you develop a close relationship	3.43
The death of a patient	3.37
Breakdown of hospital communication process	3.08
Unpredictable staffing and scheduling	3.06
Feeling helpless in case of patients who fails to improve	3.03
A physician not been present in medical emergency	3.03
Physician not being present when patients dies	2.93
Too many non-nursing tasks required such as clerical work	2.91
Not enough time to complete all my nursing tasks	2.88
Criticism by physician	2.86
A physician ordering what appears to be inappropriate treatment for a patient	2.86
Performing procedures that patients experience as painful	2.82
Lack of an opportunity to talk openly with other unit personnel about problems on the unit	2.82
Floating to other units that are short-staffed	2.81
Difficulty in working with a particular nurse (nurses) within the ward	2.81
Uncertainty regarding the operation and functioning of specialized equipment	2.81
Inadequate information from a physician regarding the medical condition of a patient	2.77
Not enough time to provide emotional support to a patient	2.68
Feeling inadequately prepared to help with the emotional needs of patient's family	2.65
Watching a patient suffer	2.64
Being asked a question by a patient for which I do not have satisfactory answer	2.62
Lack of an opportunity to express to other personnel in the ward/unit my negative feelings towards patient	2.60
Conflict with physician	2.53
Disagreement concerning the treatment of a patient	2.50
Feeling inadequately prepared to help with the emotional needs of a patient	2.50
Criticism by a superior	2.50
Difficulty in working with a particular nurse (or nurse) on the unit	2.49
Listening or talking to a patients about his/her approaching death	2.41
Making a decision concerning a patient when the physician is unavailable	2.40
Lack of an opportunity to share experiences and feelings with other personnel in the ward/unit	2.37
Not knowing what a patient or a patient's condition and its treatment	2.36
Conflict with supervisor	2.32
Fear of making a mistake in treating a patient	2.32

Source: Field Work.

dominance of the city were this study was carried out was further confirmed with the findings of this study.

Several studies have revealed that in the nursing profession nurses are facing chaos, enormous human need, lack of resources to give proper care, unresponsive administration, and a highly stressful work environment (Natukunda, 2008; Ojoatre, 2008; Ogundipe, Obinna, & Olawale, 2015; Sveinsdóttir, Biering, & Ramel, 2006).

Table 4
How Stressful Aspect of Nurses Work are According to the Different Factors.

	Mean Score	Number of items in each factor divided in order to compare factor
Factor i: Workload	18.32	3.05
Factor ii: death and dying	20.64	2.95
Factor vii: conflict with other nurses	12.93	2.95
Factor v: uncertainty concerning treatment	13.84	2.77
Factor iii: inadequate preparation	7.78	2.59
Factor vi: conflict with physician	12.61	2.52
Factor iv: lack of staff support	7.79	1.95

Source: Field Work.

Overall, the findings from this study revealed that ‘workload’ ranked highest followed by death and dying as the most frequent stressful aspect of nurses’ work. This is supported by findings of other studies in different settings major source of stress in different nursing studies in different settings (Zaghoul, 2008; Al-Kandari & Thomas, 2008; El-Jardali, Dumit, Jamal, & Mouro, 2008; Purcell, Kutash, & Cobb, 2011; Halpin, Terry, & Curzio, 2017).

Lambert et al. (2004) suggest that, regardless of culture and country specific professional role, nurses identify the amount of work that they are expected to carry out and the emotional issues related to death and dying to be overwhelming. The result also shows that conflict with other nurses ranked lowest as the least frequent aspect of nurses’ work. This agrees with studies conducted in Australia (Pinikahana & Happell, 2004).

Nurses in this study further ranked death and dying as the second most frequent stressful aspect of nurses’ job. This finding is consistent with other studies (Rodrigues & Chaves, 2008; Brunero, Cowan, & Fairbrother, 2008; Mohamed, Gaafar, & Abd Alkader, 2011; Qiao, Li, & Hu, 2011). Also, stress associated with caring for the dying patients may develop because nurses have traditionally focused on providing care to the living, with often dramatic efforts to preserve life (Adeolu, Yusuf, & Popoola, 2016; Oxtoby, 2005; Pit & Hansen, 2016).

The mean stress score across all the factors from the NSS in this study were all higher than the previous studies cited. This implies that nurses in the two selected hospitals were this study was carried were more stressed as compared to those in other settings that have been assessed and documented previously. This is not surprising because Nigeria health system is largely understaffed and this is reflected by the results of this study as workload ranked highest. When there is increased workload there will be increased level of stressed on the few nurses working with diverse consequences on their health and productivity. Also in many of the wards there is inadequate equipment to facilitate the work of the nurses. Our study revealed a higher score when compared to Hughes and Umeh (2005) in England, Lambert et al. (2004) in South Korea and Chang et al. (2007) in New Zealand and Australia respectively.

With regards to frequency of stress, the nurses that participated in this study ranked inadequate staff highest among the most frequently recurring factors that lead to stress. Inadequate staff results in excessive workload which had also been identified consistently in other studies as contributing to stress (Purcell et al., 2011). Short staffing contributes to stress with a paradoxical impact on absenteeism, ill health and attrition from nursing (Ojoatre, 2008).

Our study also found that there is no significance differences in the level of stress experienced in the two hospitals under study. This is

Table 5
Independent T test was used to compare mean level of stress among nurses in the two Hospitals.

	Category	N	Mean	Std. Deviation	Std. Error Mean	t value	df	P
Level of stress	Hospital 1	123	99.35	24.75	2.23	1.492	181	0.137
	Hospital 2	60	93.27	28.11	3.63			

Source: Field Work.

probably due to the fact that the two hospitals are within the same locality and owned by the same government. It is therefore possible that the nurses in the two hospitals are faced with the same challenges contributing to stressful events as they carry out their daily professional obligations. Therefore, occupational stress has been linked with nursing burnout, if the environment for which the nurse practice can be conducive then stress will decrease. Stress may also lead to absenteeism at work because of the physical, emotional and psychological effect it will have on the nurse

8. Conclusion

Nurses are vulnerable to occupational stress because of intense daily activity. With the global increase in the aged population, increased intensity of health care problems, increased incidence of chronic illnesses and advanced technology, nurses are faced with a variety of work-related stressors. Findings of the present study show that workload is the number one aspect of nurses’ job that results in highest frequency of stress. Employment of more nurses may help to reduce the impact of workload on their quality of life and quality of services rendered.

9. Recommendation

To reduce occupational stress among nurses, strategies such as solving problem approach, conflict management and assertiveness training, creation of fun in the work environment, encourage and reward creativity among staff to generate ideas and implement new practices, shared governance and self –scheduling may be employed. Promote new learning experiences among staff, they should actively participate in organizational committees and groups in correlation with nursing and midwifery council; promote change as constructive, engage staff in the change process and reward positive changes in behaviour and practices.

Conflict of interest

We write to declare that there is no conflict of interest on this article.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijans.2019.01.008>.

Table 6
Independent T test was used to compare mean level of stress among senior and junior nurses.

	Category	N	Mean	Std. Deviation	Std. Error Mean	t value	df	P
Level of stress	Senior Nurses	82	99.76	25.27	2.79	1.127	181	0.261
	Junior Nurses	101	95.41	26.50	2.64			

Source: Field Work.

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