

Relationship Between Work Stress and Job Satisfaction among Nurses in Federal Psychiatric Hospital, Calabar

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Abstract

This study was conducted to ascertain the relationship between work stress and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar, Cross River State. Four research questions were raised and four hypotheses to give the study a sense of direction. A descriptive cross-sectional design was adopted and data collected through structured and validated questionnaire with high coefficient reliability of 0.86. Using a purposive sampling technique, all the 105 nurses in Federal Psychiatric Hospital were used for the study. Data collected were presented and analysed using frequency table, simple percentages, and weighted mean score. The hypotheses were tested using independent t-test with aid of Statistical Package of Social Sciences (SPSS) version 20. Findings revealed that there is significant relationship between working conditions regarding remuneration and availability of working resources; workload regarding attention to many patients; shift duty/long working hours; role conflict/ambiguity in tem of ambiguous organizational goals; and job satisfaction among psychiatric nurses in Federal Psychiatric Hospital, Calabar. This implies that nurses should ensure mutual relationship and understanding between in-mates, colleagues and management bodies enabling dialogue for good working condition and provision of tools. Following the findings, it was recommended among other things that; government should embark on recruitment of more male psychiatric nurses to relieve workload on nursing staff and increase nurse to patient ratio in the hospital for effective health care delivery.

Keywords: For the purpose of this study, these key terms are defined thus:

- **Work:** The activities carried out by nurses in the clinical area which are aimed at providing nursing care for the patients.
- **Stress:** Any work activity which has unpleasant emotional or physical effect on nurses.
- **Stressor:** Any life event or work process that causes stress to a nurse. In this study, the stressors include: working conditions, workload, shift duty/long working hours, and role conflict/ambiguity.
- **Workload:** The amount of work compared to the workforce.

Introduction

Work life is one of the important parts of our daily lives which cause a great deal of stress. Hospital work often requires coping with some of the most stressful situations found in any workplace. Psychiatric nurses have been dealing with patients with psychological and physical illness which are life threatening and injurious to the patient and society. This had directly and indirectly been hampering nurses' lifestyles, family and societal adjustments as a result of complicated tight schedules and inappropriate staff/patient ratio (Etim, Bassey & Ndep, 2015).

Researchers have identified factors which are often related to job satisfaction, and highly ranking is the level of work stress experienced by the employee with may be due to factors such as poor working condition, excessive work load, shift work, long hours of work, role ambiguity, poor relationships with the superiors, patients and relatives (Syed & Anisa, 2011).

A lot of stress abounds while attending to psychotic patients to control his unwanted behaviours. This prevails wandering out of context, negativism, poor hygiene, kleptomania, destruction, fights, homicide and suicide.

Nursing requires the delivery of humane, empathetic, culturally sensitive, proficient and moral care, in working environments with limited resources and increasing responsibilities. Such imbalance between providing high quality care and coping with stressful working environment can lead to job dissatisfaction. In Federal Psychiatric Hospital, Calabar no research to the best of the researchers' knowledge has been conducted to ascertain the relationship between work stress and job satisfaction among Nurses. Therefore, this study will however fill this gap in knowledge and provide the stance for improvement in nurses' work environment and conditions, for a better patient care.

Working conditions contribute a great deal to stress and consequently low job satisfaction in the workplace. According to Nabire (2010), working conditions such as assignment to scheduled working hours, performance of repetitive task and not having a clear job description, contributes to lack of job satisfaction among nurses. Poor working conditions like noisy ward, series of patient's complaints, fight among patients, high level of alert and observations to prevent escape have led to high levels of stress among psychiatric nurses. Unfortunately, this situation is not only limited to developing nations where the nursing workforce is faced with poor staffing, working under the constant threat of public violence and criticisms, verbal and physical abuse by patients and their relatives (Mathew, 2013). In British hospitals, nurses are overworked and underpaid giving rise to stress and sickness, absenteeism, which allegedly cost the government billions of pounds to repair (Spector, 2007).

In another study in South Africa Health Care Institutions, work-related issues such as lack of incentives, low pay and poor working conditions demoralise nurses and contribute to lack of job satisfaction (Andrew, 2006). Certain components of positive work environments have also been linked to better nurses' outcomes. In a meta-analysis study, Evans (2007) identified that positive nurse-physician collaboration and autonomy were related to nurse job satisfaction, opportunities for personal growth and promotion. A study by Porter et al. (2000) indicated that identifying a partnership between nursing management and psychiatric nurses at the bedside to jointly improve the work environment had positive effect on nurses' turnover.

Shift/long hours of work and job satisfaction

Nurses as a group of health personnel engage in shift duty, and the nature of their work demands a 24 hours duty. Since no person can work round the clock without sleep, such jobs that demand a 24 hour duty have to be covered by a system of shift duties by different people, leading to a shift duty arrangement (Abaa, 2013).

This shift has been said to be stressful and may lead to negative health effects (especially the night shift) at three levels; shift duty has been known to disturb body physiology which in man has been developed to run as circadian rhythm. As such, it may be assumed that shift duty may result in a biological disorder in man (Barriball & While, 2012).

According to Syed and Anisa (2011), shift duty generates stress in individual nurses and nurses with the stress of shift work manifest it in various ways. Some nurses by understanding and becoming consciously knowledgeable about the inherent nature of shift duty in nursing, try to adjust to it. As observed by Evans (2010), a lot of nurses use social support to moderate health effect of shift duty and also reduce the symptoms of stress. As opined by Kloppe et al., (2012), shift duty is recognized as an occupational stressor that affects the consent of job satisfaction among hospital nurses.

Furthermore, myriads of research have studied the relationship between shift duty and job satisfaction of nurses. These studies have documented varying results. For instance, in a study conducted by Mathew (2013) on clinical nurses' satisfaction with night shift, findings showed that 55.4% of the nurses were fairly satisfied with night shift. In another submission by Khamisa, Oldenburg, Peltzer & Iiiac (2015) while assessing the relationship between shift work duty and satisfaction among nurses; the nurses who had voluntarily chosen shift duty showed significantly higher job satisfaction as compared with those who were forced to work.

Providing inpatient nursing care inevitably involves shift duty. Shifts of 12 hours or longer have become increasingly common for nurses in hospitals in some countries in Europe (Beh & Loo 2012). This change is mainly driven by managers' perception of improved efficacy from reducing the number of nurses shifts a day, therefore resulting in fewer handovers between shifts, less interceptions to clinical care provision and increased productivity due to a reduction in the overlap between two shifts. From the nurse perspective, longer shifts offer a potential to benefit from a compressed working week, lower commuting costs and increased flexibility (Andrew, 2006).

However, studies on long hours of work in Nigeria showed that nurses who worked beyond 8 hours were at higher risk of burnout, stress and consequently low morale to work (Mathew, 2013). Contrarily, studies in developed countries found insufficient evidence of effect of shift length on nurse job satisfaction (Evans, 2010). While a more recent study among European nurses investigated the association between long working hours and nurses' psychological wellbeing, the findings showed that nurses were satisfied with 12 hours shifts because they were entitled to more time off and this helped them balance work and personal commitments.

Similarly, Syed and Anisa (2011) reported that American nurses working extended shifts, particularly longer than 13 hours were satisfied with their work schedule but were more likely to experience burnout and work stress than nurses who worked shifts of 8 or 9 hours.

Workload and job satisfaction

It has been empirically proven that workload is the highest-ranking work stress factor among nurses. Excessive patient workloads have been shown to lead to job dissatisfaction, burnout and intent to leave nursing. A perceived inability to provide quality care because of heavy patient's workload, also lower work productivity and increases sickness absences (American Nurses Association (ANA), 2009).

According to Evans (2010), nurses are nearly twice more likely to be absent due to illness or injury than the average worker in other occupations. Public sector nurses worked the equivalent of 11,400 full time-equivalents in paid and unpaid overtime in 2010 at Canada. Two decades of national and international research have consistently demonstrated a clear relationship between workload and poor patient outcomes, including increases in mortality rates, hospital acquired infections, pressure ulcers and medication errors. The link between nursing workloads and patient safety is as clear in long term care as it is in acute and not having to provide adequate care to patients due to workload have been linked to reduced job satisfaction in the nursing profession (Mathew, 2013). Workload has been shown to be one of the most frequent stressors (Li & Lambert, 2008). In a study of 102 nurses in a Chinese intensive care unit, excessive workload was the most frequently cited source of workplace stress. This was as a result of nursing shortage, with fewer nurses to care for more patients. Workload, shift work, overtime and covering for absent colleagues were the most commonly identified stressors (Li & Lambert, 2008). Excessive workload was also included as a major contributor to stress among hospital based Brazilian nurses (Li et al., 2012).

As documented by West African College of Nursing (2014), the most obvious means of reducing the workload of practitioners is to ensure that staffing levels are adequate, including administrative staff that could reduce the paper work burden on nurses. In the United States, recent funding increases introduced by the government promise improvements in nursing staff recruitment (Department of Health, 2013a) and the Department of Health (2013b) has noted that there has been excellent progress in both recruitment and retention of nurses during the past 2 years, even exceeding their own forecast. Unfortunately, this cannot be said of countries in sub-Saharan Africa, especially Nigeria, where nurses are seen to be leaving the profession on daily basis, either through retirement or to other professions, and recruitment is not commensurate with the growing population of patients. This has created a vicious cycle of job dissatisfaction and increasing intent to leave (West African College of Nursing, 2014).

Role conflict/role ambiguity and job satisfaction

Role ambiguity is lack of clarity on one's job profile. The employee remains confused about his/her role or tasks, caused by lack of required information, lack of communication of available information, or recipient of contradictory messages regarding the role (Becker, 2011). On the other hand, role conflict has been explained by Becker (2011) to occur when workers are given different and incompatible roles at the same time, or their roles overlap with another worker or work group. According to Workplace Health and Safety (WHS, 2014), the greater the role conflict, the higher the likelihood of the worker experiencing work-related stress. Becker (2011) observes that the group of health workers who frequently have their roles overlapping with that of the nurse are the physicians.

Research has clearly established the role of ambiguity and role conflict in job satisfaction. Both role conflict and ambiguity lead to low job satisfaction (Beh & Loo, 2012). Role ambiguity has a stronger negative correlation with job satisfaction compared to role conflict. The greater the role ambiguity and greater the role conflict the lesser the job satisfaction. A study on role conflict, role ambiguity and job satisfaction in nurse executive establishes a negative relationship between role conflict and role ambiguity and job satisfaction (Khamisa et al., 2015). Furthermore, it is documented by Mathew (2013) that nurses are expected to experience substantial role ambiguity and role conflict as they interact with other members of the health care team, primarily because of inadequate role definition, unexpected ethical challenges and lack of prior insight into the case manager role.

Relationship between work stress and job satisfaction

A lot of researches have been done to establish the relationship between stress and job satisfaction among nurses, which have yielded varied results. According to Abaa, Atinsdanbila, Mwini-Nyaledzigbor and Abepuoring (2013), the study on the causes of stress and job satisfaction among nurses in Ghana yielded a weak negative relationship between job satisfaction and stress among nurses in two hospitals. In another study conducted in China by Li, Hu, Zhou, He et al. (2012), findings indicated that stress negatively influenced job satisfaction, while work motivation, positively influenced job satisfaction. With this, it was therefore suggested that health care managers and policy makers should take both work stress and work motivation into consideration.

In the assertion of Mathew (2013), there is an inverse relationship between stress and job satisfaction, as stress goes up, job satisfaction falls. As a result, this increase stress could commonly lead to decreased job satisfaction and decreased quality of life. This could potentially contribute to nurses leaving the profession as an end consequence, account for the current nursing shortage. In the opinion of Evans (2010), in the healthcare organization, work stress may contribute to increased job dissatisfaction, manifesting as absenteeism and turnover, both of which detract from the quality of care.

However, other studies have reported controversial results. For instance, in a study conducted by Lindholm (2006), no correlation was found between stress and job satisfaction. In another empirical study by Van et al., (2012) to find out relationship between occupational stress and job satisfaction in Malaysia, there was no correlation between psychological stress and job satisfaction. In Egypt, a study conducted in maternity and gynaecological nursing found a negative correlation between work stress and job satisfaction.

Rational/theoretical framework

Theory of adaptation: Hans Selye, 1975.

The theoretical framework adopted for this study is the Hans Selye's theory of adaptation (Selye, 1975). He was the first to give a scientific explanation for biological stress. He explained stress based on physiological and psychological responses as General Adaptation Syndrome (GAS) and Location Adaptation Syndrome (LAS). He explained that event that leads to a three-stage bodily response are:

- Alarm

- Resistance
- Exhaustion

Alarm stage: upon encountering a stressor, body reacts with “fight-or-flight) response and sympathetic nervous system is activated. Hormones such as Cortisol and Adrenalin are released into the blood stream to meet the threat or danger. The body’s defences are also mobilized. These reactions are defensive and anti-inflammatory but self-limited. It is observed that living in a continuous state of alarm could result in death or an individual automatically moving to the second phase of resistance.

Resistance stage: During this stage, parasympathetic nervous system returns many physiological functions to normal levels while body focus resources against the stressor(s). Blood glucose level remains high, cortisol and adrenalin continue to circulate at elevated levels the body remains on red alert but the outwards appearance of the individual remains normal. If exposure is prolonged, the phase of exhaustion occurs.

Exhaustion stage: If the stressor continues beyond body’s capacity, the individual exhaust resources and becomes susceptible to disease and death.

Selye’s theory is perceived differently in one’s lifetime. In childhood, it helps develop adaptive functioning which children are vulnerable and in later years, with accumulation of life’s stressor, wear and tear decreases people’s ability to adapt, resist falls and eventually death. Selye emphasizes that stress is the non-specific response common to all stressor regardless of whether physiological, psychological or social differences in the tolerance of different people for stress.

It is important that the nurse should be aware and be able to identify both individual and environmental stressors and discuss strategies to decrease her predisposition of stressors, with the ultimate goal of creating a conducive work environment and providing adequate patient care with no adverse effect on her health.

Summary of literature review

This study on work stress and job satisfaction among nurses reviewed both empirical and theoretical literature on subheadings relevant to the variables under study.

Based on the literature, it has been observed and widely accepted that work stress is inevitable and can occur due to factors such as workload, role ambiguity, and lack of support from management. Stress affects job satisfaction in no small measure and has been found to have a direct relationship with job satisfaction, though some controversial literatures were also noted.

Various strategies have been identified for dealing with stress especially those related to intrinsic and extrinsic mechanisms of the nurse. Organization support has also been identified as an important factor in alleviating nurses’ perception of stress.

Workload, leadership/management style, professional conflicts and emotional cost of caring have been the main sources of distress for nurses for many years. However, there is disagreement as to the magnitude of their impact. Lack of reward and shift working may also now be displacing some other issues in order of ranking. Organizational interventions are targeted at most but some of this source and their effectiveness is likely limited. Individual mostly nurses must be supported because the most important resources in any organization is the employees; therefore, maintaining and supporting employees’ health is vital to ensuring their ability to work, maintain and improve standard of care.

Furthermore, stress intervention measures should focus on stress prevention for health personnel, other employees and individuals as well as tackling organization issues. Achieving these will require further comparative studies, and new tools to evaluate the intensity of distress.

Research objectives

The specific objectives of this study are to:

1. Examine the relationship between working conditions and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.

2. Ascertain the relationship between workload and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.
3. Determine the relationship between shift duty/long working hours and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.
4. Determine the relationship between role conflict/ambiguity and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.

Research questions

1. What is the relationship between working conditions and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar?
2. What is the relationship between workload and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar?
3. What is the relationship between shift duty/long working hours and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar?
4. What is the relationship between role conflict/ambiguity and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar?

Research hypotheses

1. There is no significant relationship between working conditions and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.
2. There is no significant relationship between workload and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.
3. There is no significant relationship between shift duty/long working hours and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.
4. There is no significant relationship between role conflict/ambiguity and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.

Significance of the study

From available literature, stress has been found to have negative effect on physical, psychological and social wellbeing of nurses. These however lead to work dissatisfaction among these nurses and consequently results in low productivity. This study will serve as a baseline survey for further research on stress among nursing students. Data generated from this study will guide policy makers and planners to enact laws that will reduce stress especially as it concerns nurses. Management of Federal Psychiatric Hospital, Calabar will find this study useful as it will guide them in planning and implementation of workplace policies in a way that will be stress-free to enhance productivity among nurses.

Limitation of the study

The researcher encountered difficulties in distributing the questionnaires used for the study. Information was not readily given by the respondents, but with determination, perseverance and a high sense of humility, the researcher overcame these obstacles. This brought about the successful completion of this study.

Scope of the study

This study will cover the relationship between workplace stressors such as working conditions, workload, shift duty/long working hours and role conflict/ambiguity; and job satisfaction. It will be limited to only nurses (both male and female of all cadres) working in all the departments of Federal Psychiatric Hospital, Calabar. These departments include: outpatient clinic, outpatient emergency, acute wards, drug ward, chronic wards, Electroconvulsive Therapy (ECT) Unit and infection control unit.

Methodology

Research design

Research design is concerned with the specific plan and method adopted in conducting a study. In this study, a cross sectional survey design was adopted. Survey research involves the collection of data to accurately and objectively describe existing phenomena (Etuk, 2010). The survey research was adopted because of its relative importance in the accumulation of accurate information from respondents at relatively low cost and greater efficiency.

Population of study

The population of study comprised of all the One hundred and fourteen (114) nurses working in Federal Psychiatric Hospital, Calabar. However, 105 nurses were on duty as at the time the study, while the remaining 9 nurses were on annual leave. Hence, the target population for the study consisted of all the 105 nurses who were on duty on the study.

Sampling/ Sampling technique

The sample size used for this study consists of all the 105 nurses who were present in various shifts (i.e. morning, evening & night shifts) in the hospital. The researcher purposively studied the entire population of nurses since they were not many.

Instrumentation

The instrument used for this study was a self-administered structured questionnaire, designed by the researcher. It was constructed in line with the objectives of the study; and consists of five (5) sections A - E. Section A was on socio-demographic data of the respondents, section B contained information on working conditions and job satisfaction, section C highlighted workload and job satisfaction, section D contained information on shift duty and job satisfaction and section E highlighted role conflict/ambiguity and job satisfaction. Items measuring the variables were measured using 4 points Likert Scale of strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD). Scores were awarded as follows: SA = 4 points, A = 3 points, D = 2 points and SD = 1 point for every positive question, and vice versa. The respondents' satisfaction was measured using Dummy's variable such that respondents with high level of stress (following their response on items under each stressor) were awarded a satisfaction score of 0 point while those with low level of stress were scored 1 point. A summary of the respondents' scores in relation to their job satisfaction is given below:

Stressor	Score range	Stress level	Satisfaction score
Working conditions	9 – 16 points	High	0
	1 – 8 points	Low	1
Workload	9 – 16 points	High	0
	1 – 8 points	Low	1
Shift duty/ long working hours	11 – 20 points	High	0
	1 – 10 points	Low	1
Role conflict/ ambiguity	11 – 20 points	High	0
	1 – 10 points	Low	1

Validity of instrument

Face validity was used for the study and was achieved through careful study of the construct to ensure that the terms were simple, clear and un-ambiguous.

Reliability of instrument

The reliability of the instrument was tested using the 'Test-Retest' method. 20 nurses were selected from the General Hospital, Calabar for the Test-Retest procedure. The instrument was distributed to these 20 nurses, same were filled and returned to the researcher on the spot. After a period of two (2) weeks, same question were given to the same respondents. Data collected from the two tests were correlated using Pearson Product Moment Correlation Coefficient (r) to ascertain its reliability and a reliability coefficient of 0.929 was obtained (*see appendix*). This shows that the instrument was reliable, and could be used for the study.

Data collection procedure

The procedure adopted for data collection was a face-to-face administration of the questionnaire to the respondents in the research setting, and on-the-spot collection of completed questionnaires was maintained by the researcher. This method enhanced the retrieval of all the questionnaires and gave participants an opportunity to ask questions on grey issues. However, participants were given a minimum of ten minutes to complete the questions.

Data analysis technique

The data obtained were analysed using simple percentages and frequency tables while the study hypotheses were tested using Pearson Product Moment Correlation Coefficient (r) at 0.05 level of significance.

Results, analysis and findings

Introduction

This chapter dwells on presentation and analysis of data collected from the respondents. One hundred and five (105) questionnaires were distributed and same retrieved giving a 100% response rate. The questionnaires were sorted and data obtained were presented in frequency table and analysed using frequency counts, simple percentage, and weighted mean scores computed to assess the respondents' degree of agreement and/or satisfaction on various items of the questionnaire, while the relationship between variables were tested using Pearson Product Moment Correlation Coefficient (r).

Socio demographic characteristics of respondents

Table 1. Percentage distribution of the respondents' demographic characteristics (n=105)

S/No.	Variable	Frequency	Percentage (%)
1.	Sex:		
	Male	62	59.0
	Female	43	41.0
	Total	105	100
2.	Age:		
	20 – 24 years	21	20.0
	25 – 29 years	26	24.8
	30 – 35 years	24	22.9
	36 years and above	34	32.3
	Total	105	100
3.	Department		
	Outpatient clinic	5	4.8
	Outpatient emergency	14	13.3
	Acute wards	49	46.7
	Drug ward	15	14.3

	Chronic wards	18	17.1
	ECT Unit	2	1.9
	Infection Control Unit	2	1.9
	Total	105	100
4.	Rank:		
	NOII – NOI	51	48.6
	SNO – PNO	28	26.7
	ACNO – CNO	23	21.9
	AD	3	2.8
	Total	105	100
5.	Nature of Employment:		
	Regular	105	100
	Contract	-	-
	Part time	-	-
	Others	-	-
	Total	105	100

Source: Questionnaire.

Table 4.1 above shows that out of the 105 respondents used for the study, 62 (59.0) were male while the remaining 43 (41.0) were female. 21 (20.0%) respondents were between 20 – 24 years of age, 26 (24.8%) were within the age range of 25-29 years, while 24 (22.9%) respondents were between 30 – 35 years, and 34 (32.3%) were 36 years and above. 5 (4.8%) respondents worked in the outpatient clinic, 14 (13.3%) worked in the outpatient emergency clinic, 49 (46.7%) worked in the Acute wards, while 15 (14.3%) worked in the drug ward, 18 (17.1%) worked in the chronic ward, 2 (1.9%) worked in the ECT unit, and 2 (1.9%) worked in the Infection control unit of the hospital. 51 (48.6%) were nursing officer I & II, while 28 (26.7%) were Senior and Principal Nursing officers, 23 (21.9%) were Acting Chief and Chief Nursing officers, and 3 (2.8%) were Acting Director of Nursing. All (100%) the respondents were regular employees in the hospital.

Analysis of research questions

The relationship between working conditions and job satisfaction among nurses in federal psychiatric hospital

Table 2. Working conditions and job satisfaction among the respondents

Item	Options				Total
	SA	A	D	SD	
I am being paid a fair amount for the work I do	18 (17.1)	52 (49.5)	31 (29.5)	4 (3.8)	105 (100)
I do not have enough resources to carry out my job	29 (27.6)	28 (26.7)	38 (36.2)	10 (9.5)	105 (100)
My work environment is not safe	22 (21.0)	35 (33.3)	25 (23.8)	23 (21.9)	105 (100)
The management gives me an opportunity for personal development	12 (11.4)	47 (44.8)	31 (29.5)	15 (14.3)	105 (100)

Source : Questionnaire (Nos. In parenthesis is %).

Table 2 shows that out of the 105 nurses used for the study, 18 (17.1%) strongly agreed that they've been paid a fair amount for the work they do, 52 (49.5%) agreed, while 31 (29.5%) disagreed, and 4 (3.8%) strongly disagreed on this item of the research questionnaire. 29 (27.6%) respondents strongly agreed that they've not been given enough resources to carry out their job, while 28 (26.7%) agreed, 76 (36.2%) disagreed on this item, and 20 (9.5%) strongly disagreed. 22 (21.0%) respondents strongly agreed that their work environment is not safe, 35 (33.3%) agreed, 25 (23.8%) respondents disagreed, and 23 (21.9%) strongly disagreed. 12 (11.4%) respondents strongly agreed that the management has given them an opportunity for personal development, while 47 (44.8%) agreed on this item, 31 (29.5%) disagreed, and 15 (14.3%) strongly disagreed.

Hypothesis one

H₀: There is no significant relationship between working conditions and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

H₁: There is a significant relationship between working conditions and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

Table 3. Pearson product moment correlation coefficient showing the relationship between working conditions and job satisfaction among respondents

		Working conditions	Job satisfaction
Working conditions	Pearson Correlation	1	-.823**
	Sig. (2-tailed)		.000
	N	105	105
Job satisfaction	Pearson Correlation	-.823**	1
	Sig. (2-tailed)	.000	
	N	105	105
**. Correlation is significant at the 0.05 level (2-tailed).			

Decision

Table 3 reveals a strong, negative and significant correlation between working conditions and job satisfaction among respondents ($r = -.823$, $p = 0.000$). The negative coefficient of correlation (r) indicates that; as stress arising from the stressor (working condition) increases, there will be a corresponding decrease in job satisfaction among the nurses. Hence, the two variables vary in opposite direction where an increase in one variable will lead to a corresponding decrease in the other variable. In conclusion, it could be stated there is a statistically significant relationship between working conditions and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.

The relationship between workload and job satisfaction among nurses in Federal Psychiatric Hospital

Table 4. Workload and job satisfaction among the respondents

Item-	Options				Total
	SA	A	D	SD	
I have too many patients to care for at a time	28 (26.7)	35 (33.3)	29 (27.6)	13 (12.4)	105 (100)
I have limited time to accomplish assigned responsibilities in every shift	17 (16.2)	32 (30.5)	43 (39.3)	14 (13.3)	105 (100)

Dealing with patients and relatives is stressful	34 (16.2%)	31 (29.5)	31 (29.5)	9 (8.6)	105 (100)
The staff strength in each shift is inadequate compared to the volume of work to be accomplish	57 (54.3)	20 (19.0)	18 (17.1)	10 (9.5)	105 (100)

Source : Questionnaire (Nos. In parenthesis are %)

Table 3 shows that 28 (26.7%) out of the 105 (100%) respondents used for the study strongly agreed that they have too many patients to care for at a time, 35 (33.3%) agreed, while 29 (27.6%) disagreed, and 13 (12.4%) strongly disagreed. 17 (16.2%) strongly agreed that they have limited time to accomplish assigned responsibilities in every shift, 32 (30.5%) agreed, while 43 (39.3%) disagreed on this item, and 14 (13.3%) strongly disagreed. 34 (16.2%) strongly agreed that dealing with patients and relatives gives them stress, 31 (29.5%) agreed, 31 (29.5%) disagreed, and 17 (8.6%) respondents strongly disagreed. 57 (54.8%) respondents strongly agreed that the staff strength in each shift is inadequate compared to the volume of work to be accomplish, 20 (19.0%) agreed, while 18 (17.1%) disagreed, and 10 (9.5%) strongly disagreed on this item of the questionnaire.

Hypothesis two

H₀: There is no significant relationship between workload and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

H₁: There is a significant relationship between workload and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

Table 5. Pearson product moment correlation coefficient showing the relationship between workload and job satisfaction among respondents

		Workload	Job satisfaction
Workload	Pearson Correlation	1	-.796**
	Sig. (2-tailed)		.000
	N	105	105
Job satisfaction	Pearson Correlation	-.796**	1
	Sig. (2-tailed)	.000	
	N	105	105
**. Correlation is significant at the 0.05 level (2-tailed).			

Decision

Table 5 shows that the p-value (0.000) associated with the computation of the correlation coefficient ($r = -.796$) is less than the level of significance (0.05). With this result, the null hypothesis is rejected leading to a conclusion that there is a significant relationship between workload and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar. The strong, negative correlation indicates that as workload increases among the nurses, their job satisfaction will correspondingly decrease.

The relationship between shift duty/long working hours and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

Table 6. Shift duty/long working hours and job satisfaction among respondents

Item	Options				Total
	SA	A	D	SD	
I work for too many hours a day	41 (39.0)	17 (15.9)	25 (23.8)	22 (21.0)	105 (100)
Working longer than 8 hours gives me stress	44 (41.9)	36 (34.3)	21 (20.0)	4 (3.8)	105 (100)
Working in shift is stressful to me	35 (33.3)	32 (30.5)	14 (13.1)	24 (22.9)	105 (100)
I prefer night shift to morning or evening shift	20 (19.0)	17 (16.2)	28 (26.7)	40 (38.1)	105 (100)
Working with out-patient is less stressful than working with in-patients	39 (37.1)	14 (13.1)	28 (26.7)	24 (22.9)	105 (100)

Source : Questionnaire (Nos. In parenthesis are %)

Table 4 shows that out of the 105 respondents, 41 (39.0%) strongly agreed that they work for too many hours a day, 17 (15.9%) agreed, while 25 (23.8%) disagreed, and 22 (21.0%) strongly disagreed. 44 (41.9%) strongly agreed that working longer than 8 hours gives them stress, 36 (34.3%) agreed on this item, while 21 (20.0%) disagreed, and 4 (3.8%) strongly disagreed. 35 (33.3%) respondents strongly agreed that working in shift is stressful to them, 32 (30.5%) agreed, 14 (13.1%) disagreed, and 24 (22.9%) strongly disagreed. 20 (19.0%) strongly agreed that they prefer night shift to morning or evening shift, while 17 (16.2%) agreed, 28 (26.7%) disagreed, and 40 (38.1%) strongly disagreed. 39 (37.1%) strongly agreed that working with out-patients is less stressful than working in-patients, 14 (13.1%) agreed, 28 (26.7%) disagreed, and 24 (22.9%) strongly disagreed on this item.

Hypothesis three

H₀: There is no significant relationship between shift duty/long working hours and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

H₁: There is a significant relationship between shift duty/long working hours and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

Table 7. Pearson product moment correlation coefficient showing the relationship between shift duty/long working hours and job satisfaction among respondents

		Shift duty/long working hours	Job satisfaction
Shift duty/ long working hours	Pearson Correlation	1	-.853**
	Sig. (2-tailed)		.000
	N	105	105
Job satisfaction	Pearson Correlation	-.853**	1
	Sig. (2-tailed)	.000	
	N	105	105
**. Correlation is significant at the 0.05 level (2-tailed).			

Decision

Since the p-value (0.000) associate with the computation of the coefficient of correlation ($r = -0.853$) is less than the level of significance, we reject the null hypothesis and conclude that “there is a significant relationship between shift duty/long working hours and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.

The relationship between role conflict/ambiguity and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

Table 8. Role conflict/ambiguity and job satisfaction among respondents

Item	Options				Total
	SA	A	D	SD	
Role conflict between nurses and other health professionals gives me stress.	42 (40.0)	31 (29.5)	23 (21.9)	9 (8.6)	105 (100)
The goals of the organization are not clear to me.	10 (9.5)	8 (7.6)	52 (49.5)	35 (33.3)	105 (100)
My effort to do a good job are always blocked with hospital rules	34 (32.4)	37 (35.2)	16 (15.2)	18 (17.1)	105 (100)
My duties as a nurse are not clearly defined	3 (2.9)	11 (10.5)	45 (42.9)	46 (43.8)	105 (100)
Other health professionals (physicians) duties conflict with my duties as a nurse.	39 (37.1)	21 (20.0)	23 (21.9)	22 (21.0)	105 (100)

Source : Questionnaire (Nos. In parenthesis are %).

Table shows that out of the 105 respondents used for the study, 42 (41.0%) strongly agreed that role conflict between nurses and other health professionals gives them stress, 31 (29.5%) agreed, while 23 (21.9%) disagreed, and 9 (8.6%) strongly disagreed on this item. 10 (9.5%) strongly agreed that the goals of the organization are not clear to them, 8 (7.6%) agreed, 52 (49.5%) disagreed, and 35 (33.3%) strongly disagreed. 34 (32.4%) strongly agreed that their effort to do a good job are always blocked by the hospital's rules, 37 (35.2%) agreed, 16 (15.2%) disagreed, and 18 (17.1%) strongly disagreed. 3 (2.9%) respondents strongly agreed that their duties as a nurse are not clearly defined, 11 (10.5%) agreed, while 45 (42.9%) disagreed, and 46 (43.8%) strongly agreed. 39 (37.1%) respondents strongly agreed that other health professionals (physicians) duties conflict with their duties as nurse, 21 (20.0%) agreed, while 23 (21.9%) disagreed on this item, and 22 (21.0%) strongly disagreed.

Hypothesis four

H₀: There is no significant relationship between role conflict/ambiguity and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

H₁: There is a significant relationship between role conflict/ambiguity and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar

Table 9. Pearson product moment correlation coefficient showing the relationship between role conflict/ambiguity and job satisfaction among respondents

		Role conflict/ ambiguity	Job satisfaction
Role conflict/ ambiguity	Pearson Correlation	1	-.860**
	Sig. (2-tailed)		.000
	N	105	105
Job satisfaction	Pearson Correlation	-.860**	1
	Sig. (2-tailed)	.000	
	N	105	105
**. Correlation is significant at the 0.05 level (2-tailed).			

Decision

Table 9 reveals a strong, negative and significant correlation between role conflict/ambiguity and job satisfaction among respondents ($r = -.860$, $p = 0.000$). The negative coefficient of correlation (r) indicates that; as stress arising from the stressor (role conflict/ambiguity) increases, there will be a corresponding decrease in job satisfaction among the nurses. Hence, the two variables vary in opposite direction where an increase in one variable will lead to a corresponding decrease in the other variable. In conclusion, it could be stated there is a statistically significant relationship between role conflict/ambiguity and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar.

Discussion of findings

Findings of the study as revealed in the preceding chapter will be discussed based on the research questions.

Research question 1: What is the relationship between working conditions and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar?

Findings from the test of research hypothesis one revealed a strong, negative and significant relationship between working conditions and job satisfaction among the respondents ($r = -0.823$, $p = 0.000$). This is an indication that stress resulting from working conditions varies indirectly with job satisfaction among nurses in the hospital. Hence, an increase in the level of stress resulting from poor working conditions will lead to a reduction in nurses' job satisfaction which may serve as a deterrent to the overall productivity of the nurses and the institution as a whole. This finding agrees with the finding of Andrew (2006) who in a study in South Africa found that working related issues such as lack of incentives, low pay and poor working conditions demoralized nurses and contribute to lack of job satisfaction. In the same vein, Spector (2007) found that in British hospitals, nurses were over-worked and underpaid giving rise to stress and sickness absenteeism, which according to him cost the government billions of pounds.

Research questions 2: What is the relationship between workload and job satisfaction among nurses in Federal Psychiatric Hospital?

Findings from the test of hypothesis two revealed correlation coefficient (r) of -0.796 with an associated probability ($p = 0.000$) which is less than the level of significance ($p = 0.05$). Judging from the stated results, the null hypothesis was rejected with a conclusion that there is a significant relationship between workload and job satisfaction among the respondents ($p < 0.05$). The negative value of the correlation coefficient shows that as the level of stress resulting from workload increases among the nurses, their job satisfaction will proportionately decrease and vice versa. In line with this is the result of a study carried out by Li and Lambert (2008) who found that excessive workload was the most frequent source of workplace stress among Chinese nurses working in an intensive care unit. Also, Li et al. (2012) cited excessive workload as a major contributor to stress among hospital based Brazilian nurses.

Research question 3: What is the relationship between shift duty/long working hour and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar?

The test of hypothesis three using Pearson product moment correlation revealed a correlation coefficient (r) of -0.853 with an associated probability of 0.000 which is less than the level of significance ($p = 0.05$). This led to the conclusion that 'there is a statistically significant relationship between shift duty/long working hours and job satisfaction among the respondents. The negative value of the correlation coefficient indicates that an increase in the stress level of the respondents resulting from shift duty/long working hours will lead to a decrease in the level of job satisfaction among the respondents. This result correlates with the result of Mathew (2013) who found a fair level of job satisfaction among clinical nurses who work in night shifts. In the contrary, Evans (2010) reported that European nurses were satisfied with 12 hours shift because they were entitled to more time off and this helped them balance work and personal commitment.

Research question 4: What is the relationship between role conflict/ambiguity and job satisfaction among clinical nurses in Federal Psychiatric Hospital, Calabar?

Finding from the test of hypothesis two revealed a strong, negative and significant relationship between role conflict/ambiguity and job satisfaction among the respondents used for the study ($r = -0.860$, $p = 0.000$). The negative of the coefficient is an indication that stress resulting from role conflict/ambiguity varies indirectly with job satisfaction; hence, increase in role conflict/ambiguity will lead to a decrease in job satisfaction among the nurses. This finding is in line with the assertion of Beh and Loo (2012) who opined that both role conflict and ambiguity lead to low job satisfaction. This is because regardless of the stress experience by the respondents as a result of role conflict/ambiguity, they still satisfied with their job delivery.

Summary of the study

This study was undertaken to ascertain the relationship between work stress and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar. The specific objectives of the study were to examine the relationship between; working conditions, workload, shift duty/long working hours and role conflicts/ambiguity, and job satisfaction among nurses. In like manner, four research questions were raised, and four research hypotheses formulated. For a better understanding of the topic, related conceptual and empirical literature were reviewed based on the objectives of the study; and the theoretical framework adopted for the study was Hans Selye's Theory of Adaptation. For the study, an analytical cross-sectional design was used to study the entire nursing population of 105 nurses in Federal Psychiatric Hospital. The instrument for data collection was a structured questionnaire which was duly validated and its reliability was tested using the test-retest reliability method. A reliability coefficient of 0.89 was achieved indicating that the instrument is reliable and could be used for the study. A total of 105 questionnaires were distributed to the nurses and same were properly filled and returned to the researcher. Data collected were sorted, coded and analysed with the aid of the Statistical Package for Social Sciences (SPSS) version 20. Data were presented and analysed using frequency table and simple percentages; while the research hypothesis was tested using Pearson Product Moment Correlation Coefficient significant at 0.05. Findings from the study revealed a strong, negative and significant relationship between the stressors (working conditions [$r = -0.823$, $p = 0.000$], workload [$r = -0.796$, $p = 0.000$], shift duty/long working hours [$r = -0.853$, $p = 0.000$] and role conflict/ambiguity [$r = -0.860$, $p = 0.000$] and job satisfaction among nurses in Federal Psychiatric Hospital, Calabar ($p < 0.05$).

Implication of the study

Arising from the result of this study, it implies that nurses should form mutual relationship and understanding between in-mates, colleagues and management bodies to enable them tender their unsatisfactory work condition, appropriate fixing of staff to meet job schedules, adequate management of available resource and facility and prompt reporting of impending hazard awaiting patients, staff and management for quick attention.

Recommendations

Based on the findings of this study, the researcher recommends that:

1. Government should embark on recruitment of more male psychiatric nurses to curtail excessive workload on staff nurses and increase nurse to patient ratio in the hospital for effective health care delivery.
2. Government in conjunction with policy makers on health concerned issues should advance strict policies on hours of work per day to avoid undue stress resulting from long working hours.
3. Roles of healthcare professionals should be distinctly defined and workers sensitized to avoid role conflict between the nurses and other health care professionals (especially physicians) in the hospital.
4. Management of the hospital should ensure that materials and equipments needed for infection control practices are adequately provided to ease the fear of contracting infections and enhance job satisfaction among clinical nurses in the hospital.

Suggestion for further study

The researcher suggests that further study on this topic should be carried out in other health care facilities to compare with the results of this study, and new variables should be introduced in order to evaluate the intensity of stress among nurses.

Conclusion

Based on results of this study, it is concluded that stressors such as poor working conditions, workload, shift duty/long working hours and role conflict/ambiguity have a strong negative effect on job satisfaction of nurses in Federal Psychiatric Hospital, Calabar. This is because the nurses were not satisfied with the working conditions in the hospital. They also seem to have been working longer than supposed with limited staff strength and other facilities that could ease stress and enhance comfort. These together with uncertainty in role performance generate stress among the nurses which has been found to impede their job satisfaction. Hence, the higher the nurses are stressed due to their poor working conditions, the lower the level of satisfaction they derive while carrying out their routine job in the hospital.

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