

**WORK – RELATED STRESS AMONG HEALTHCARE WORKERS IN UGEP,
YAKURR LOCAL GOVERNMENT AREA, CROSS RIVER STATE, NIGERIA: A
STUDY OF SOURCES, EFFECTS, AND COPING STRATEGIES**

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ABSTRACT: *Work Related Stress (WRS) is the harmful physical and emotional responses that occur when the requirements of job do not match the capabilities, resources, or needs of the worker in the work environment. Hospital work stress is a nosocomial stress characterized by stressors like; work over load, under – staffing, use of redundant equipment, poor promotion, poor managerial relationship with staff, poor working environment, excessive/prolonged working hours, etc. This study sought to determine the work – related stress among healthcare workers in Ugep. Data were collected using primary and secondary source. 198 semi–structured questionnaires were designed/administered through purposive sampling. Data generated were analysed using descriptive statistics such as mean, percentages, and illustrative graphs. Results and findings showed that 180 (92.8%) healthcare workers felt stressed at work due to two or more of the following factors; work over-load, emergencies, adhoc duties (3.5%), lack of equipment (30.8%), poor work environment, poor managerial support, poor staff attitude to work and fellow staff (29.8%). Findings from this study also showed that headaches/migraine (76.3%), poor concentration (11.6%), and loss of work interest (10.1%) were the major effects of WRS. The study demonstrates that there is significant relationship between work – related stress on healthcare workers and service delivery, work over – load and increase in work stress, and poor managerial relationship/support and staff attitude to service delivery. This study recommends that, stress reduction strategies and management interventions lie in the adoption of both managerial/organizational interventions that reduce stress at source and to some extent involves the application of individual (staff) interventions. Reducing and managing the level of nosocomial stress will go a long way to positively influence service delivery. Healthcare workers tend to work more efficiently in a comfortable, safe and protective environment where there are sufficient equipment, proper remuneration, management interest on staff welfare, proper management of shifts and days off as well as staff involvement in issues and decisions that concerns their job and over – all well – being.*

KEYWORDS: Stress, Work-related Stress, Nosocomial Stress, Coping Strategies, Healthcare Workers, Patient.

INTRODUCTION

Background of the Study

Hospital work often requires coping with some of the most stressful situations found in any workplace. Hospital workers have to deal with patients with life-threatening injuries and illnesses which could be further complicated by their tight work schedules and disproportionate staff/patient ratios. Emergencies further complicate an already stressful work situation. Additionally, hospital workers have to accommodate demanding patients, especially those suffering from chronic debilitating diseases as well as those experiencing acute or severe pains (Brunero, Cowan, Grochulski, & Garvey, 2006).

Despite the perceived, felt, and expressed needs that exerts varying amounts of pressure and stress in the health workplace, their work outputs, and service delivery, not much has been done to generate scientific evidence on how to effectively address stress within the health care delivery system in Nigeria (Akinboye, 2002). Research has shown that workplace interventions that deal with the prevention of stress provide convivial working environments for the health workers, thereby alleviating the stress on them and by extension improve or consolidate service delivery.

Statement of the Problem.

According to the Health Advocates (2013), Stress – related distraction or sleepiness account for estimated 60% to 80% of accidents on the job and near misses. According to the National Institution for Occupational Safety and Health (NIOSH) in 2008, 60% to 90% of health care providers' poor attitude to clients is attributed to stress response. The Nigerian health system is bedevilled with chronic underfunding, dilapidated health facilities, poor staffing and inadequate working tools which has been sources of stress to healthcare providers. Most health care provided especially at the secondary and primary levels of care in Nigeria have to work under very harsh and unconducive conditions which contribute to the increase of work-related stress of hospital staff (Onasoga, Ogbemor, & Ojo, 2013). Stress in the work place impairs both quality and quantity of work and has been a strong contributing factor to accidents or near misses in the healthcare settings (i.e. affecting service delivery) (Cotton, & Hart, 2003). Stress in the workplace is associated with a number of health problems in employees. Workplace stress has been linked to low job satisfaction, reduced productivity and an increase in occupational accidents (Clarke, & Cooper 2004; Cotton, & Hart 2003; Veena, & Catherine 2010). It is often believed that when a staff is tired, there is bound to be misuse of equipment which may lead to its damage, injury to the staff or to the product (in this case it is the patient).

General Objective of the Study

The general objective of this study was to determine the sources, effects, and coping strategies of work-related stress among healthcare workers in Ugep, Yakurr Local Government Area of across River State, Nigeria.

Specific Objectives of the Study

The specific objectives of this study were to;

- i. determine the perceived sources of WRS to healthcare workers in the study area.

- ii. determine how WRS affects service delivery.
- iii. identify current stress reduction and coping strategies in the selected hospitals for this study.

LITERATURE REVIEW

The alarming spike in the incidence of reported stress among hospital employees in recent years and its impact on the client has made the management of stress an urgent business strategy for health institutions (Mojoyinola, 2008). The nature of work is changing at whirlwind speed, perhaps now more than ever before, job stress poses a threat to the health of workers and, in turn, to the health of organization (Steven, 2010). The United States National Institute of Occupational Safety and Health (NIOSH) (2008) studies on “Exposure to Stress” indicates that health care workers have higher rates of substance abuse and suicide than other professions and elevated rates of depression and anxiety linked to job stress. In a survey by Northwest US National Life, the percentage of workers who report their job is “very or extremely stressful” is 40%, while survey by the Families and Work Institute showed 26%, and 29% for survey by Yale University (Steven, 2010).

Stress can be broadly defined as the negative reactions people have to aspects of their environment. According to Mojoyinola (2008), Stress is derived from the word “Stringi”, which means “to be drawn tight”. Stress is however, interpreted by each person differently. Since it is a feeling, that involves the emotions, it is not something entirely definable or describable. Despite efforts over the last half-century to define the term, no satisfactory definition of stress exists. Defining stress is much like defining happiness. Craig Hospital in 2013 saw stress as an inescapable fact of life. However, one recognizes the unpleasant, usually anxiety – related state, when one thinks of the term ‘stress’ as applying to us. Two aspects should be kept in mind. The first is that it is a ‘state’ – and therefore it is ideally not permanent. Secondly, when one is stressed, one is less likely to behave in the rational way compared to when one is calm. Essentially, stress is the emotional and physical response people experiences when they perceive an imbalance between demands placed on them and their resources at a time to cope with the challenge. What this means is that one experiences stress whenever one is faced with an event or situation that one perceives as challenging to their ability to cope (Brunero. et al, 2006). Stress is not the events that surfaces our way itself but how we interpret them to be (Fig. 2). So stress results from interpreting those events as dangerous, difficult, painful, or “unfair”, and/or feeling that one does not have the resources to cope with them.

There are differences in underlying causes/sources and triggers for everyone. However, some workplace factors are more likely to lead to stress, such as badly designed shift work, poor communications, bullying and harassment. Workload, lack of managerial support and threats, lack of incentives and job security, violence and bullying has been reported to be the major sources of work related stress (Paul, 2013). Specifically, interpersonal conflicts such as those with patients, supervisors and colleagues, and medical doctors account for a large part of the stress among medical workers (Hirokawa, Taniguchi, Tsuchiya, & Kawakami, 2012).

According to the American Psychological Association (APA) (2008), the top stress for people in the workplace, in order of importance, are; low salaries (43%), heavy workloads (43%), lack of opportunity for growth and advancement (43%), unrealistic job expectations

(40%), and job security (34%). When all these increase the stress level of the hospital staff, it influences service delivery.

METHODOLOGY

Study setting

This study was conducted in Ugep – Urban of Yakurr Local Government Area, Cross River State, Nigeria. Ugep Urban is the largest of all the Yakurr settlements and lies between latitude 5° 40'1" and 6° 10'1" north of the Equator and longitude 8° 21' and 6° 10'1" east of the Greenwich Meridian and 120km (75miles) northwest of Calabar the capital of Cross River State, Nigeria. It has a land mass of 54.5 square kilometer. The major language spoken by the people is Lokaa with an approximate population of 144, 421 as estimated in 2006. Ugep share northern and eastern boundaries with Assiga, Nyima, and Agoi Clans of Yakurr Local Government Area, southern boundary with Biase Local Government Area and Eastern boundary with Abi Local Government Area. Ugep comprises 5 Political wards, namely; Ijiman, Ketabebe, Ijom, Ikpakapit, and Bikobiko (Iyam, Inah, Udonwa, & Etim, 2013). The community has a total of eleven (11) healthcare facilities, comprising of: one public General Hospital, seven private hospitals, three Primary Healthcare Centres, as well as medical diagnostic laboratories and pharmaceutical outlets. There is a total of about 268 staff strength distributed across the facilities which constituted an approximated health manpower size in the study area as at the time of this study.

Scope of Study

The Scope of the study covers hospital work – related stress and it included nurses, medical doctors and receptionists of the selected health facilities.

Study Population

The study population were health staff in the selected public and private hospitals in Ugep, Yakurr Local Government Area of Cross River State, Nigeria. There were seven (7) private hospitals and one (1) public hospital selected for this study. The General Hospital had a staff strength of 171 and Danex hospital had a staff strength of 22.

Sample Size Determination

The Bluman's formula (2004) was used.

$$n = \frac{Z^2pq}{d^2}$$

Where; **n** = the sample size

Z = Z-score (1.92)

d = margin of error (7% = 0.07)

p = prevalence (50% = 0.5)

$$n = \frac{1.96^2 \times 0.5 \times 0.5}{0.07^2} = 196$$

$$\text{With 5\% non-response} = \frac{196 \times 5}{100} = 9.8 + 196 = 206$$

Since the total number of hospital staff (198) in the selected hospitals was smaller than the calculated sample size, all the staff were therefore included in the study (Purposive Sampling).

Sampling Procedure

A total of **198** respondents (health staff) were drawn from the two facilities; **175** health staff from general hospital, and **23** health staff from Danex hospital. There were seven (7) private hospitals and one (1) public hospital summing up to eight (8) hospitals in Ugep as at the time of this study. Sample size was drawn as follows;

Stage-I: Selection of Hospitals.

One Public hospital was selected, while one private hospital was randomly selected out of the seven (7) private hospitals. This was done by writing down all the names of the hospitals folded in papers and then blindfoldedly picked. In doing this, Danex Hospital was probably picked out of the seven private hospitals.

Stage-II: Selection of Departments.

All the departments in each selected hospital was selected and studied in no special order ranging from medical department, administrative department, Laboratory department, to nursing department.

Stage-III: Selection of Healthcare Workers.

Total of 198 respondents were selected: 175 healthcare workers from general hospital and 23 healthcare workers from Danex hospital.

Instrument for Data Collection

The instruments for data collection were interviewer-administered questionnaire, key-informant interviews; hospital staff register and direct field observations. The questionnaire was titled "the stress assessment/workload analysis questionnaire for hospital staff". Section-A comprised the demographic data of the respondent; Section-B on work assessment; Section-C on staff perception of stress; Section-D on staff response to stress/service delivery, and Section-E on staff self-efficacy/health beliefs. The questionnaire incorporated structured and unstructured questions.

Method of Data Analysis

Data was analysed using Statistical Package for Social Sciences (SPSS) program version 20. Results are presented in frequencies, percentages, charts and tables.

RESULTS

Data was collected from 198 respondents. Out of these, 47 (23.7%) respondents were males and 151 (76.3%) females. Among these, respondents aged 18 – 27 were 35 (17.7%), 28 – 37years were 85 (42.9%), 38 – 47years were 62 (31.3%), 48 – 57years were 13 (6.6%), and 58 – 67years were 3 (1.5%). With regards to the respondents marital status, 111 (56.1%) were married, 79 (39.9%) single, 3 (1.5%) divorced, and 5 (2.5%) were widowed while none fell within others. At the time of this study, 98 (49.5%) respondent had between 1 – 5 children, 10 (5.1%) had 6 – 10 children and 90 (45.5%) had no children. All the 198 (100%) respondents subscribed to the Christian faith (Table 1). 164 (82.8%) staff provide direct clinical care to patients while 34 (17.2%) provide non-clinical support services. On adhoc duties, 57 (28.8%) of the staff admitted to performing adhoc duties, while 141 (71.2%) denied performing ad-hoc duties. About 95% admit they feel stressed as a result of Work-related stress.

Table 1. Demographic Characteristics of Respondents

Variables	Frequency	Percentage (%)	Mean	SD
Gender			1.76	0.427
Male	47	23.7		
Female	151	76.3		
Total	198	100		
Age			2.31	0.892
18 – 27	35	17.7		
28 – 37	85	42.9		
38 – 47	62	31.3		
48 – 57	13	6.6		
58 – 67	3	1.5		
68 – 77	0	0		
78 & above	0	0		
Total	198	100		
Marital Status			1.67	0.637
Single	79	39.9		
Married	111	56.1		
Divorced	3	1.5		
Widowed	5	2.5		
Others	0	0.0		
Total	198	100		
Number of Children			1.60	0.586
None	90	45.5		
1 – 5	98	49.5		
6 – 10	10	5.1		
Total	198	100		
Religion			1.00	0.000
Christianity	198	100		
Islam	0	0		
Traditional	0	0		
Others	0	0		
Total	198	100		

Data Source: Field Survey, 2015.

In describing Work Related Stress (WRS), 168 (92.8%) perceived it to be all factors that impedes service delivery, 13 (7.2%) have different views to it like being quantitative roles (so much work role) or qualitative roles (job roles that are hard to understand and requires more skills) while 17 (8.6%) have little or no idea to what it is. Sources of stress to healthcare workers as perceived by respondents showed that, 48 (24.2%) said it emanates from emergency situations, 7 (3.5%) said performing adhoc duties, 61 (30.8%) said absence/obsolete/insufficient equipment, while 59 (29.8%) said it emanates from staff attitude to work and staff attitude to fellow staff. For signs or symptoms felt when stressed, 151 (76.3%) said Headaches/Migraine, 23 (11.6%) said poor concentration and 20 (10.1%) cited Loss of work interest. 106 (54.1%) respondents affirmed that their out of work role contributes to their stress level at work while 90 (45.9%) said it does not affect their service delivery (Table 2). Stress coping technique at work showed that 155 (78.3%) find time to have a break and rest while 43 (21.7%) do not break to rest but rather wait till the next staff on shift to take over.

On how WRS can be managed, reduced or prevented, 43 (22.3%) suggested employment of more staff, 20 (10.4%) suggested provision of equipment, 5 (2.6%) suggested proper remuneration, while 91 (47.2%) suggested management's intervention on staff's welfare.

Table 2. Respondents Perception of Stress

Variables	Frequency	Percentage(%)	Mean	SD
WRS				
All Factors that Impedes Service Delivery	168	84.8 (92.8)	1.07	0.259
Others	13	6.6 (7.2)		
No response	17	8.6		
Total	198	100		
Staff who often feel Stressed at Work				
Often	180	90.9 (92.8)	1.07	0.259
Not often	14	7.1 (7.2)		
No response	4	2.0		
Total	198	100		
Sources of Stress at Work				
Emergency Situations	48	24.2	3.01	1.333
Adhoc Duties	7	3.5		
Absence/Obsolete/Insufficient Equipment	61	30.8		
Staff Attitude to work/Fellow Staff	59	29.8		
Others	23	11.6		
Total	198	100		
Signs Felt at Work When Stressed				
Headache/Migraine	151	76.3	1.38	0.749
Poor Concentration	23	11.6		
Loss of Work Interest	20	10.1		
Others	4	2.0		
Total	198	100		
Effect of Out of Work Roles to Service Delivery				
It affects service delivery			1.46	0.500
Does not affect service delivery	106	53.5 (54.1)		
No response	90	45.5 (45.9)		
Total	2	1.0		
	198	100		

Data Source: Field Survey, 2015.

DISCUSSION

The healthcare workers indicated that the major sources of their stress in the hospital included; Emergency Situations (24.2%), Adhoc duties (3.5%) (I.e. executing other roles order than their primary role for which they were employed), which is in line with the view by Onasoga, Ogbebor, and Ojo (2013) about sources of stress. Nurse (30.8%), constituted the highest percent of healthcare workers who reported that their major source of stress for them in the hospital is absence of equipment, and that, where these equipment are available, it is either obsolete or insufficient to boost the level of service delivery. Staff attitude to work (negligence of duty) and as well staff attitude to fellow staff (low level of staff – staff co – operation) constituted source of stress for 29.8% of staff as supported by the research carried out by Hirokawa, Taniguchi, Tsuchiya, and Kawakami (2012) in Japan on Hospital Staff. Attitude of patients, poor salaries, reading doctors hand writing, death of patient, and power failure were also provided as other sources of stress among healthcare workers (11.6%) (Fig.-1).

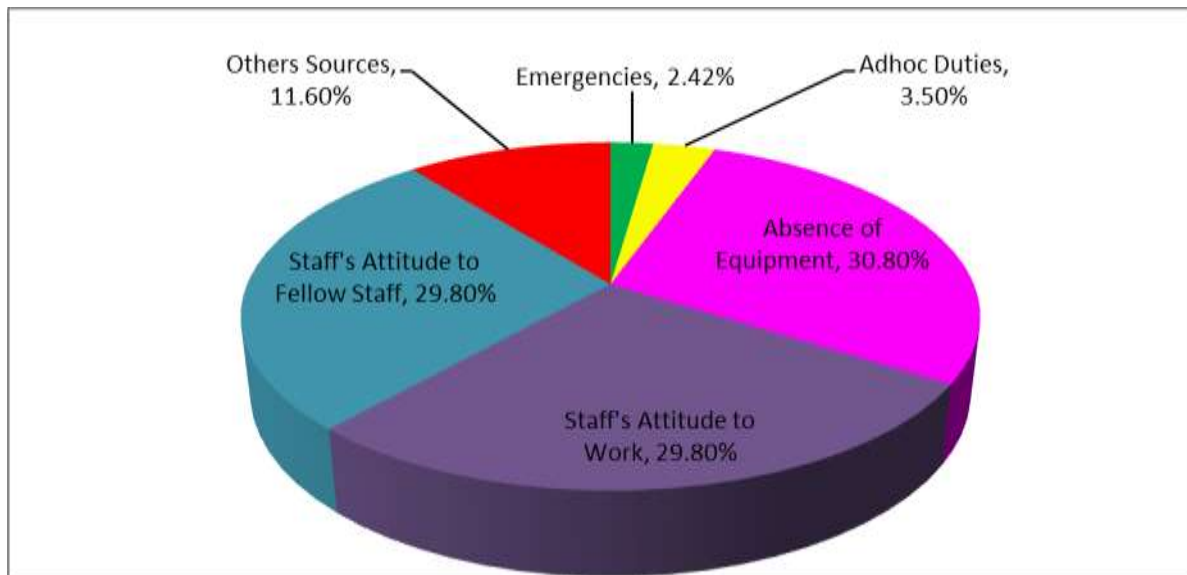


Fig.-1. Sources of Stress to Healthcare Workers. Data Source: Field Survey, 2015.

When stressed, healthcare workers experience physiological changes like; headache, body pains, migraine (76.3%), and hunger (2%), presenteeism and absenteeism. However, other effects of stress as expressed by respondents showed that, 23 (11.6%) experiences negative effects on their concentration level on their job and 20 (10.1%) experience loss of interest in the care of patients. Where there is poor concentration and loss of job interest, there is a possibility of near misses, occupational accidents, and/or damage of equipment. Where staff loses interest in service delivery, it may reduce patient satisfaction because loss of interest may reduce level of care. This study shows that about 58.6%, 2.6%, 31.3% (92.5%) of the healthcare workers respectively sometimes, often and most often express anger in the course of service delivery to clients resulting from stress.

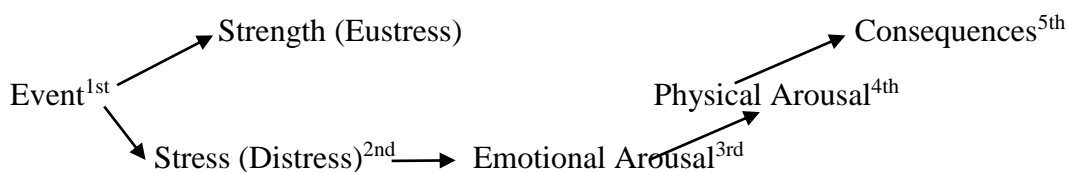
Findings of this study showed that 78.3% find time to have a break and rest as coping strategy which implies that at the time of rest if there is no other staff to take over the care of patient at that point, the healthcare worker on call still goes back to work and this further

increases staff's stress level, 21.7% do nothing to cope with stress in the work place but rather wait till the next staff on call comes to take over which puts the health of the staff at more risk. 47.2% of the healthcare workers suggested that management intervention will go a long way to reduce the level of stress healthcare workers are passing through in the work place. 10.4% and 2.6% of respondents suggested provision of equipment and proper remuneration while 17.6% of healthcare workers were of the opinion that job clarity, shifts and creation of days off and the putting in place mechanism for monitoring to ensure that it is adhered to, can go a long way in reducing stress at work.

SUMMARY/CONCLUSION

This study describes that events in itself is not necessarily harmful; it is how one interprets it that determines its effect (Fig. 2). This implies that stress in itself is not harmful. Stress is to human condition what tension is to the violin string; too little and the music is dull and raspy; too much and the music is shrill or the string snaps and it fortifies the position of APA (2008). This implies that, stress can be the kiss of death or the spice of life. The issue lies really on how to manage it. Tom in 2002 noted that Stress – related problems are the second most commonly reported cause of work – related ill – health among healthcare workers, and this study has also shown that there is a relationship between work over – load and WRS with service delivery. This research shows that healthcare workers satisfaction at work is very much related to how work makes them feel, even more than how much they get paid – though that counts, or what their career prospects are. The bulk of stress reduction strategies and management interventions lie in the adoption of both managerial/organizational interventions that reduce stress at source and to some extent involves the application of individual (staff) interventions. Reducing and managing the level of nosocomial stress of healthcare workers will go a long way to positively influence service delivery. Healthcare workers tend to work more efficiently in a comfortable, safe and protective environment where there are sufficient equipment, proper remuneration, management interest on staff welfare, proper management of shifts and days off as well as staff involvement in issues and decisions that concerns their job and over–all well–being.

Fig. 2: The Five(5) Steps of Stress Process



RECOMMENDATIONS

Based on the findings from respondent's perceived causes/sources of Work Related Stress (WRS) and its effect on healthcare workers and on service delivery, the following recommendations have been made:

Individual level

1. Healthcare workers should understand the primary source and cause of stress.

2. Making certain lifestyle changes like making out time to have a balanced diet, sleep after work hours and exercising.
3. Taking breaks from work where it is provided.
4. Proper time management.

Organizational Level

As it concerns WRS, priority should be given to the organizational changes that improve working conditions as this will arrest stress from source.

1. Chief Medical Directors (CMDs), Healthcare Managers at all levels of the healthcare delivery system, and Employers should truly value the health of their patients and the productivity of their workers by documenting the causes/sources of stress affecting healthcare workers (recognized employees stressors) at least once in six months to help new staff benefit from the program.
2. Managers should give workers opportunity to participate in decisions and actions affecting their job like asking employees what strategies may provide remedies.
3. Ensuring that workloads are in line with workers capabilities and resources.
4. Enabling each employee to have time off and breaks.
5. Job clarity by creating bounds for each healthcare provider in their service delivery.
6. Increasing number of staff meetings.
7. Management identifying stressors by reviewing number of reported near misses, absenteeism, complains from clients and staff, workers illness, etc.
8. Periodic evaluation of stress interventions to see whether it is yielding the expected results.

National Level

1. Provision of employment opportunities to qualified healthcare workers at least annually to help reduce work over – load on healthcare workers.
2. Provision of new work equipment and training staff on its operation.
3. Creating opportunity for healthcare workers to embark on refresher courses to help them update their knowledge on service delivery.
4. Proper remuneration to serve as an incentive to healthcare workers.

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