

Theoretical Examination of Stress Management and Coping Mechanism among Health Workers

Anto Bidda Jacob

Nigerian Army University Biu, Borno State

Abstract

Overtime, stress seems to pose a threat to the existence of human life, and if not properly handled the human life might be at risk of extinction. One's ability to handle, manage and cope with stress showcase the individual's strong will and ability. Indeed, in Nigeria, stress has taken over the healthcare sector due to unrealistic patients demand, poor working conditions, poor government policies amongst others. The General Adaptation Syndrome (GAS) theory and transactional theory of Lazarus were adopted in order to better understand why people often times adapt to stress that emanate from work related issues. This study recommends the need for government, Non-Governmental Organizations and other owners/operators of healthcare providing facilities should provide timeout during working hours in order to avail the health care workers time to rest at work.

Keywords: *Coping Mechanism, Health, Management, and Stress*

Introduction

Since healthcare environment requires changing continuously, stress is common in the life of the healthcare professionals' work. The healthcare environment is not derived of this imbalance between demands being made upon an individual and the resources available to help them cope with the demands. But if the demand is seen as overwhelming and exceeds the individual's capacities or resources, they become stressors and this will trigger mental and physical stress (Howard, 2008). The emotional and physical demand involved within the healthcare environment can strain even the resilient healthcare professional. Also, 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 organizations (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).

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.

Health workers are faced with a lot of job challenges. These challenges in one way or the other, affect them both in the way they attend to their duties and their emotional well-being. This is so because health workers must constantly provide empathy to those who need emotional support (MacDonald, Herbert, Regel & Stanbrok, 2011). Sleep deprivation is a big cause of stress affecting practicing physicians. Studies have linked lack of sleep on the part of physicians with higher rate of surgical complications. According to them, doctors might not be at their optimal levels as fatigue can affect mental acuity (MacDonald et al,

2011).

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).

Concept of Stress

Stress is a holistic concept and so is difficult to be specifically defined. From birth till death, individuals are subjected to the stressful circumstances (Cardoso & Fernandes, 2011). In 1936, Selye Hans was the first to introduce the notion of stress that was originated from the Latin word ‘stringer’ meaning starvation, sting, pain and physical hardship/suffering. Selye Hans identified stress in 1936 as “the non-specific response of the body to any demand placed upon it” (Hans, 1936). He further extended

this definition in 1956 and defined it as “any external event or internal drive which threatens to upset the equilibrium of the organism” (Hans, 1956). Stress is defined as a vibrant and dynamic state where the individual has to tackle with a chance, restraint or a demand linked to what he or she aspires for and the result of which is recognized as both significant and vague (Robbins, 2001). When the resources of the individuals are not adequate enough to deal with the emerging requirements and strains of the circumstances, physiological and psychological pressures are generated that results in stress (Khuwaja, 2004).

Stress has been identified as a major development that undermines workers’ moral and physical health. According to Chambers, (2003) & Akah, (2005), shortage of man power, inadequate provision of facilities and equipment, un-conducive work environment, among others can adversely affect job satisfaction, thereby leading to stress in work place. This greatly reduces productivity and increases disability among the working population. The negative effects of hospital stress on psychological well-being have also been widely reported. For example, Blix & McManus, Keeling & Paice, (2004) stated that almost half of their respondents (48 percent) reported

psychological health problems resulting from work stress and that 84 per cent considered that their productivity and performance had been negatively affected. These authors cited depression and anxiety as the most critical stress-related symptoms reported.

Stress can be broadly defined as the negative reactions people have to aspects of their environment. According to Mojinyinola (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. 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 here 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).

Stress is defined as a challenge, dare, warning or threat that interrupts with the normal functioning and pace of an

individual’s life (Sanderson, 2004). Stress is defined as a dynamic and vibrant condition within an individual that results in response to the requirement of adaptation (Wolf & Goodell, 1968). Cox, Randall, & Griffiths (2002) identified that stress does not only poses threat to the individual’s quality of work life but also deteriorates his physical and mental well-being.

General Adaptation Syndrome (Gas) Theory

The definition of stress has been varied in term of its conceptualization from different authors and researchers in the study of stress. At this stage, it is vital to assess the relevance of theoretical models of stress to enable us to fully understand the concept of stress, its applications and approaches that have been used and outcome measures stress. The General Adaptation Syndrome or GAS is an early model of stress which viewed stress response as a natural human adaptation to a stressor (to change or leave the stressors) in the individual's physical or psychological environment (Champoux, 2003). Selye described the process of GAS into three stages (Cooper & Marshall, 1978).

i. Alarm reaction - in which an initial shock

phase of lowered resistance is followed by counter shock during which the individual's defense mechanisms become active.

ii. Resistance - the stage of maximum adaptation and hopefully successful return to equilibrium for the individual. If, however, the stressor continues or defense does not work, the individual will move on to;

iii. Collapse or Exhaustion - when adaptive mechanisms collapse.

According to Selye, a full understanding of stress and its many effects must involve great attention to the three related stages (Selye, 1956). Arousal rises quickly to high levels and many physiological changes that prepare our bodies for strenuous activity (either flight or combat) take place. The body prepares to fight or adjust to the stressor by increasing heart rate, respiration, muscle tension and blood sugar. This initial reaction is soon replaced by the second stage known as resistance. Here, if a stressor is too intense the individual may feel restless to cope with it. However, after a short period of alarm the individual will gather all strength and start resisting the negative effects of the stressor. The body tries to return to a normal state by

adapting to the stressor. If stress persists, the body's resources may become depleted and the final stage known as exhaustion occurs. During the exhaustion stage the body begins to wear down from exposure to the stressor. At this point, the ability to cope decreases sharply and severe biological damage may result if stress persists. If a person experiences the stressor long enough and does not effectively manage the source of stress then stress-related illnesses can appear. The damaging effects of stress occur in this stage for both the individual and organization (Baron & Greenberg, 1990; Champoux, 2003; Payne & Walker, 1996; Greenberg, 2002; Griffin, 1990).

While stress is reflected by the sum of the nonspecific changes which occur in the body at any one time the GAS encompasses all nonspecific changes as they develop throughout time during continued exposure to a stressor (Selye, 1956). The GAS is a useful model for explaining physiological processes which may lead to stress-related illness (Payne & Walker, 1996). The GAS theory says (Selye, 1956; Rice, 2000; Lyon, 2000):

- a. All life events cause some stress.
- b. Stress is not bad per se, but excessive or unnecessary stress should be avoided

whenever possible.

c. The stressor is the stimulus eliciting a need for adaptation; stress is the response.

d. The nonspecific aspects of the body's reaction to an agent may not be as obvious as the specific effects. Sometimes, only disease or dysfunction will make an individual realize that he or she is under stress.

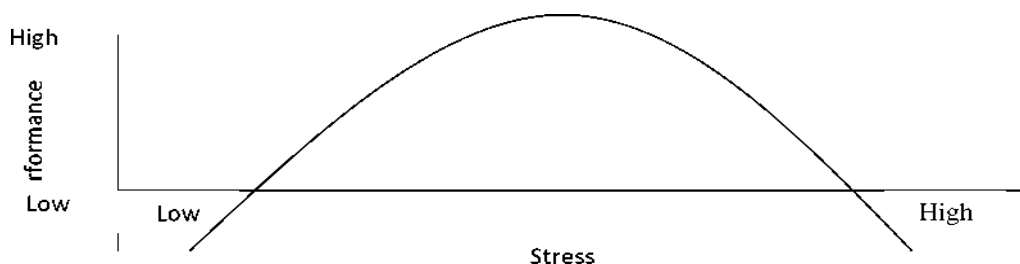
e. Stress should be monitored.

f. Removal of the stressor eliminates stress.

This theory also demonstrates that work stressors can also affect an individual in the home and social environment. Thus, when isolating the sources of stress one also has to be aware of the importance of extra-organizational sources of stress that can affect the behavior, performance, mental and physical health of an individual at work (Davison & Fielden, 1999). Selye stated that he did not believe people should aim for a stress-free life because some stress is positive and productive while some negative stress is simply unavoidable. The goal is to cope or minimize the assault of stress (Wade & Travis, 2003). Stress is a

natural and essential part of living and growing (Burns, 1992). Moderate levels of stress and stimulation such as challenging but achievable goals can energize and motivate employees. The middle area of the graph shows the stress levels that result in the greatest performance. When a level of arousal exceeds our ability to meet the demand placed upon us we will experience feelings of burnout, exhaustion and ultimately will impair employee's performance (Wright & Noe, 1996). Extremely high and extremely low level of stress tends to have negative effects on performance.

A certain amount of stress among employees is generally considered to be advantageous for the organization because it tends to increase work performance. However, when an employee experience too much or too little stress, it is generally disadvantageous for the organization because it tends to decrease work performance (Certo, 2000).



This figure is showing us the level of stress. From the graph above, the position of this theory is that stress is both positive and negative. The left side of the graph shows an angle of low stress which can have both negative and positive effects on an individual or group while the other angle to the right shows a life of plenty stress which can either have negative or positive impact on people lives. However, the GAS theory argued that stress should be maintained at an optimal level to enable workers to be effective.

Transactional Theory

Transactional Model of Stress and Coping by Lazarus and Folkman (1984). The Transactional Model of Stress and Coping is a framework for evaluating the processes of coping with stressful events. The Model is useful for health education, health promotion and disease prevention according to Glanz, Rimer, & Viswanath, (2008). Health Workers are usually faced with enormous responsibility and demand for care, intense emotional pressure surrounding death and dying, prolonged and exhausting working hours. (Sexton et al. 2009) and as such, studying how they are affected by stress should take into consideration both their physical as well as psychological responses. Emphasis should be laid on how stress affects their behaviour and output as it relates to the quality of care they

are capable of rendering.

According to Lazarus & Cohen (1977), stressors are demands made by both internal and external environments that upset the balance of an individual, thus affecting both physical and psychological well-being and requiring action to restore balance. The Model of stress they proposed was based on the consideration that stress is a transactional phenomenon which is dependent on the meaning the perceiver gives the stressor or stimulus. In other words, the person under stress firstly appraises the situation and gives it a meaning, thereafter; he considers the resources at his disposal for the management of the situation. The resources according to Lazarus & Cohen (1977) could be social or cultural.

Generally speaking, when one is faced with environmental impacts both from within and outside the body, the natural instinct is to evaluate the source of the impact. What-ever meaning we give to what is influencing us determines the reaction to it. The appraisal given to such impact could be either positive or negative. It could be interpreted to mean danger or potential threat or it could be seen as something necessary. According to Cohen (1984), the appraisal could be in two folds- primary and secondary. Primary appraisal is a person's judgment about the significance of an

event as stressful, positive, controllable, challenging or irrelevant, while a secondary appraisal is an assessment of peoples coping resources and options.

Also both the General Adaptation Syndrome and transactional theory tried in explaining the how individuals adapt and cope with stress but failed to explain the measures and means in which stressors can totally be avoided or either manage properly, the theories failed to understand that adapting or coping with the stressors are both dangerous to the individual and the hospital, as such avoiding the stressors responsible for the stress will go a long way in reducing the accidents that might occurred due to stress in the hospital.

Stress Management Techniques

There are many known and traditional means of managing everyday stress. These could be in form of physical exercise, emotional and psychological therapies, change in work approach, medications among others. The choice of management procedure adopted is usually subjective to the source and nature of the stress and the resources available to the individual under stress (Cohen 1984). It is believed that the best management practice for stress is learning healthy coping strategies. The first step to effective stress management is

to understand oneself better and to appreciate what constitute stress and how one reacts to stressful situations. In the health workers context, to manage the demand arising from the strenuous nature of the job and still render quality health services to patient could be seen as effective coping. Most literatures that worked on stress and coping tried to link the coping strategies to the type and sources of the stressor. In the case of Lockley, Barger, Ayas, Rothschild, Czeisler, and Landrigan (2007), there is need to establish safe hour work limit for health workers in order to prevent the high rate of fatigue related medical errors and injuries. In other words, to be able to manage the stress arising from long working hours, there is need for management action on limiting the amount of hours done by health workers. The kind of shifts and the duration of shifts can be controlled by a combined effort of the nurse managers and the health personnel working in the hospitals. Fielden & Peckar (1999) agreed that stress is associated to the number of hours done by hospital doctors but added that the availability of social support helped to reduce the negative effect of the stress on their performance. Consequently, social support was identified as an effective coping strategy for junior doctors as against senior doctors. In the work of Sharma et al. (2008), health workers are believed to have

lower level of burnout than surgeons and they agreed that this is as a result of better working practice, the type of responsibilities and the management structure. By this, a better-organized management structure and organized individual working practice are seen as effective way of managing or coping with work stress. (Embriaco, Papazian, Kentish-Barnes, Pochard, and Azoulay, (2007) is in agreement with (Heaney, Richard and Price 1995) that coping resources such as social support or working group is an effective coping strategy for stress. Other preventive strategies include effective communication strategies during end of life care, prevention of management conflicts (Embriaco et al. 2007) and perceived control (Heaney et al 1995).

Stress Coping Strategies

Thus, one of the important factors in avoiding burnout is applying stress coping strategies (GrusiFarshi, & Moslemi, 2005). Two dimensions of coping are problem- focused coping and emotion-focused coping. Problem-focused coping consists of concrete attempts made to alter the stressful event while emotion-focused coping consists of attempts made to alter stressful feelings (LeSergenta, & Haney, 2005). People typically employ problem-focused coping strategies, purposively targeted at solving the problem at hand, when they perceive control over

stressful events. Emotion-focused coping, aimed at minimizing negative emotions through seeking distraction and social support or by avoiding problems, predominates when people feel that the stressful event is something that must be endured. A systematic review showed that problem-focused coping was associated with good health, while emotion-focused strategies were related to poor health. In Asian and Australian hospital workers, problem-focused coping was related to better mental health, whereas emotion-focused coping was associated with reduced mental health. This finding suggests mental health benefits for health workers who use problem-solving to cope with stress by addressing the external source of the stress, rather than emotion-focused coping in which hospital personnel try to control or manage their internal response to stress (Schreuder, Roelen, Groothoff, Van der Klink, Mageray, and Pallesen, 2012). For example, in a study of female hospital workers, it was reported that affective-oriented coping was significantly associated with depressive symptoms, even after controlling for the effects of job stress, nursing-related work experience, and social support (Lin, Probst, & Hsu, 2010). Moreover, a study of hospital workers in Australia and New Zealand found that type of coping strategy was significantly associated

with physical and mental health, after controlling for the effects of job stress, years as a health personnel in the current clinical unit, and income (Chang, Bidewell, & Huntington, 2007). Finally, Gunus,en and Ustun also reported, in 2010, that burnout among health workers is reduced when coping skills training was provided (Gunus,en & Ustun, 2010). A passive coping style, which is a type of emotion-focused coping, associates with poor (mental) health in both Norwegian and Dutch hospital workers. Health workers with habitual passive coping may experience little control over work and low support within the health workers team. Either way, it is important for health workers managers to recognize passive coping, because this type of coping associates with poor health (Schreuder et al, 2012).

Since health workers are under considerable stress, their professional and social status should be taken into serious consideration; otherwise, nursing services may undergo total deterioration (Grusi Farshi, & Moslemi, 2005). There are certain inevitable stressful factors in nursing that can adversely affect health workers' minds and behaviors; it is important to find ways to deal with these factors before we can take measures to improve health workers' professional quality and teach them coping strategies (Lashonda,

2004). Health workers, when experiencing great stress, draw upon various coping strategies, and obviously, their manner of coping with stress influences the quality of their professional performance. Thus, it is essential to identify the various coping strategies nurses apply to reduce stress. This study aims to explore the coping strategies used by nurses working in intensive care units. Based on the above reviews, job stress can be detrimental to the health and well-being of an individual. Therefore it is important to discuss effectively ways of responding to stress on the individual level. The major purpose of this sub-section is to summarize and integrate a body of literatures pertinent to understanding how an individual copes with stress occurring in organizational and non-organizational life. The mechanisms to be discussed are mainly from the clinical, counseling and social psychological areas where evaluative information is more readily available from the literatures. Generally, coping has been focused on internal and external resources for coping with stress which deal with work and general life stresses (Bunero et al 2006). Coping can be defined as constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the

resources of the person (Lazarus and Folkman, 1984).

Coping with stressful events is complex, highly dynamic and is directed toward moderating the impact of such events on an individual's physical, social and emotional functioning (Akinboye 2002). Generally there are three actions to achieve effective coping. Firstly, one has to attempt to anticipate potential stressors before encountering them and prepare appropriate plans of attack for the various outcomes. Then an individual has to reduce the physical arousal caused by stressors. It is vital that the individual has the capability to separate the facts from emotions in order to reduce the stressors. Finally, increasing positive feelings under stressful conditions help to decrease the level of stress (Akah 2011).

Social support has been recognized and proved to be an excellent coping mechanism to reduce stress (MacDonald et al 2011). Social support can be defined as a friendly, approachable, trustworthy, cooperative and warm attitude among members of the social network to which a person belongs (Kristensen, Borritz, Villadsen, & Christensen 2005). A helpful attitude by a partner or friends regarding problems gives the individual concerned the opportunity to

find support in solving stressful event. This means an individual begins to build connection between members in the workplace by providing opportunities, understanding, expressing views and to be involved in decision making processes in the work-related matters (Clarke & Cooper 2004). Participation in decision-making is found to be able to increase communication among workers and improves the interpersonal relations within work units. As a result of these communications, social support increases, and hence, experienced job-related strain decreases (Chankova, Nguyen, Chipanta, Kombe, Onoja, & Ogungbemi 2007; Nelson and Backer, 2000).

Effects of Stress

By understanding the nature of stress and major sources of job stress, it is vital to know the effects of job stress on physical health, psychological and behavioral on an individual. There is overwhelming evidence to indicate that continuous exposure to stressful situations, or an accumulation of stressors over a period of time, is directly associated with the onset of illness, emotional stress and engaging negative activities (Adebayo and Ezeanya, 2010). The fact that stress can make people ill and is implicated in the incidence and development

of coronary heart disease, mental illness, certain types of cancer, smoking, dietary problems, excessive alcohol consumption and substance abuse, life dissatisfaction, accident and unsafe behavior at work, migraine, stomach ulcers, hay fever, asthma and skin rashes, marital and family problems (Akah, 2005). Moreover, it was identified that an individual who has poor problem-solving and coping skills, inability to understand and cope with own emotions, and lack of social and self-assertion skills is more vulnerable to stress and subsequent alcohol and drug misuse (Akinboye, 2002).

According to Cunningham (2000), in addition to physical illnesses, individuals experience significant pain and discomfort due to disturbances of the psychological and emotional systems. An angry, frustrated, emotionally unstable person is not capable of rational responses and good judgment. Such stress repercussions hinder a person's effectiveness in relating to others. They result in emotional disturbances, alcohol or drug use, impaired relationships, sleeping difficulties, disturbances in one's thought processes and concentration, behavioral disruptions and occupational burnout (Cunningham, 2000). Kristensen, Borritz, Villadsen & Christensen (2005) conducted a study among nurses of two metropolitan

hospitals on reasons absent from work. The findings indicated that nurses' daily expressed desires to be absent from work were related to tiredness, personal problems, ill health, stress and work interfering with home activities (MacDonald et al, 2011). In addition, absence also has high significant with demographic factors such as age, tenure of service, gender, salary and seniority (Thomson, Griffiths & Davison, 2000).

Conclusion

Stress has long become part of human life. This is because the human race has since learned and adapted to this menace. This has become a past time for people in certain career of life and the health workers are not excluded from this problem. This is not unconnected to the large number of patients and the availability of few hands to provide certain services. Stress has eaten deep into the fabrics of the Nigerian health care sector and if not properly managed and adjusted to, errors might become the order of the day, casualties might be recorded on daily basis, and as such this calls for an urgent attention.

Recommendations

The following recommendations were put forth by this study.

This study recommends the needs for employers of labour, such government, Non-

Governmental Organizations, private hospital owners amongst others to create timeout for the health care workers during working hours just like a mini-break for them to be able to refresh themselves by so doing it will help in stress reduction.

There is need for employers of labour government to put in a favourable working environment for the health workers in order to eliminate transfer of aggression that might result in stress causation. Furthermore, employers of labour needs to provide good working environment, such as more structures, call rooms and good transport vehicles for efficient service delivery.

There is need for employment of more hands that will make the work so easy and eliminate stress that might arise from work overload. Also there is need for and proper communication among health caregivers in order to avoid transfer of aggression that can result in stress. In the same vein this study recommends the need for employers of labour to enhance the level of motivation in terms of remuneration, this in turn will enhance job commitment and reduce stress and anxiety that emanate from workload and worries over unpaid bills.

References

- Adebayo, S.O and Ezeanya, I.D (2010). Effects of job autonomy, task identity and profession on burnout among health workers in Jos, Nigeria. *European Journal of Social Sciences* 14(1),116 -124.
- Akah, L, U (2005) Stressors and Job Performance of Health Workers in the Public and Private Sector. *An Unpublished M.Ed Thesis, Graduate School: University of Calabar.*
- Akah, L.U. Chukwurah, C.C and Ihejiamazu, C.C. (2011), Assessment of indices for job satisfaction among nursing staff in Calabar metropolis for Cross River State. *Canadian Social Science Journal*, 7(1) 124-129.
- Akinboye, J. O. (2002). *Coping with Stress in Life and Work Place*. Stirling - Horden Publishers (Nig.). Ltd, Ibadan.
- APA (2008). "Stress in America". American Psychological Association. U.S.A. <http://apahelpcenter.mediaroom.com>
- Baron, R.A. & Greenberg, J. (1990). *Behavior in organizations: Understanding and managing the human side of work*, 3rd ed. Boston: Allyn & Baron.
- Brunero, S., Cowan, D., Grochulski, A., & Garvey, A. (2006). Stress management for nurses. *New South Wales Nurses' Association, Camperdown* 1450, Australia.
- Burns, R.B. (1992). *10 skills for working with stress: The essential skills for*

- managing stress at work in the 1990s*. Chatswood: Business & Professional Publishing.
- Cardoso, P. M., & Fernandes, C. F. (2011). A review of the causes and effects of organisational role stress in doctors. *International Bulletin of Business Administration* (11).
- Certo, S.C. (2000). *Modern management diversity, quality, ethics and the global environment*. New Jersey: Prentice Hall.
- Chambers, R. (2003). Supporting GPs. *British Medical Journal*, 326:s100.
- Champoux, J.E. (2003). *Organizational behavior: Essential tenets*. Ohio: Thomson.
- Chang, E.M, Bidewell, J.W, & Huntington, A.D. (2007). A survey of role stress, coping and health in Australian and New Zealand hospital nurses. *International Journal of Nursing Studies*. 44(8), 1354-62.
- Chankova S, Nguyen H, Chipanta D, Kombe G, Onoja A, & Ogungbemi K. (2007). Catalyzing Human Resources Mobilization: A Look at the Situation in Nigeria. Abt Associates Inc. *Global Health Council Annual Conference, Washington DC*.
- Clarke, S. G., & Cooper, C. L. (2004). *Managing the Risk of Workplace Stress: Health and Safety Hazards*. Routledge, London/New York.
- Cohen, F., (1984). Coping. In *Behavioral Health: A Handbook of Health Enhancement and Disease Prevention*, edited by J.D. Matarazzo, S.M. Weiss, J.A. Herd, N.E. Miller, and S.M. Weiss, 7:1292. Wiley.
- Cooper, C.L. & Marshall, J. (1978). *Understanding executive stress*. London: Macmillan Press.
- Cox, T. P., Randall, R., & Griffiths, D. A. (2002). Interventions to Control Stress at work in Hospital Staff. *The Institute of Work, Health and Organizations*.
- Cunningham, J.B. (2000). *The Stress Management Sourcebook: Everything You Need to Know*, 2nd ed. Los Angeles: Lowell House.
- Davidson, M.J. & Fielden, S. (1999). *Stress and the working woman*. In Powell, G.N. (ed), *Handbook of gender and work*. Thousand Oaks: Sage Publications.
- Embriaco, N., Papazian, L., Kentish-Barnes, N., Pochard, F. and Azoulay, E., (2007). Burnout syndrome among critical care healthcare workers. *Current Opinion in Critical Care*, 13(5), pp.482-488.
- Fielden, S.L. & Peckar, C.J., (1999). Work stress and hospital doctors: a comparative study. *Journal of Stress Medicine*, 15(3), pp.137-141.
- Greenberg, J. (2002). *Managing behaviors in organizations*. New Jersey: Prentice Hall.
- Glanz, K., Rimer, B.K. & Viswanath, K., (2008). *Health Behavior and Health Education: Theory, Research, and Practice* 4th ed., San Francisco: Wiley and Sons.
- Griffin, R.W. (1990). *Management*, 3rd ed. Boston: Houghton Mifflin Company.
- GrusiFarshi, M., & Moslemi, M.

- (2005). Investigate the relationship between burnout and coping techniques Nurses Kurdistan province. *Quarterly Journal of Psychological Studies*, 1(4, 5), 5-19.
- Gunusen, N.P, Ustun, B. (2010). An RCT of coping and support groups to reduce burnout among nurses. *International Nursing Revision*. 57(4), 485-92.
- Hans, S. (1936). Thymus and adrenals in the response of the organism to injuries and intoxications. *British Journal of Experience Psychology* (17), 234-248.
- Hans, S. (1956). *The Stress of Life*. New York: Mc Graw Hill.
- Howard, F. (2008). Managing stress or Enhancing well-being? Positive psychology's contribution to clinical supervision: *Australian psychologist*, 43 (29): 05 - 113.
- Hirokawa, K., Taniguchi, T., Tsuchiya, M., & Kawakami, N. (2012). Effects of a stress management program for hospital staff on their coping strategies and interpersonal behaviors. *J-STAGES Industrial Health* 50, 487-498.
- Khuwaja, A. Q. (2004). Comparison of job satisfaction and stress among male and female doctors in teaching hospitals of Karachi. *Journal of Ayuba Medical College* 16 (1), 23-27.
- Kristensen, T., Borritz, M., Villadsen, E., & Christensen, K. (2005). The Copenhagen Burnout Inventory: A New Tool for the Assessment of Burnout. *Work & Stress*, 19, 192-207.
- Lashonda, L. (2004). *Factors that most influence job satisfaction among cardiac nurses in an acute setting*. [Thesis]. USA. Marshall University.
- Lazarus, R.S. & Folkman, S., (1984). *Stress, Appraisal, and Coping*. Springer Publishing Company.
- Lazarus, R.S. & Cohen, J.B., (1977). Environmental Stress. In *Human Behavior and Environment*. Boston, MA: Springer US, pp. 89-127.
- LeSergenta, C.M., & Haney, C.G. (2005). Rural hospital nurse's stressors and coping strategies: a survey. *International Journal of Nursing Studies*. 42, 315-24.
- Lin, H., Probst, J.C., & Hsu, Y. (2010). Depression among female psychiatric nurses in southern Taiwan: main and moderating effects of job stress, coping behaviour and social support. *Journal of Clinical Nursing*. 19(15), 2342-54.
- Lockley, S.W. Barger, L. K., Ayas, N. T., Rothschild, J. M., Czeisler, C. A. and Landrigan, C. P., (2007). Effects of health care provider work hours and sleep deprivation on safety and performance. *Joint Commission journal on quality and patient safety / Joint Commission Resources*, 33(11 Suppl), pp.7-18.
- Lyon, B.L. (2000). Stress, coping, and health. In Rice, V.H. (ed), *Stress, Coping and health: Implication for nursing research, theory and practice*. London: Sage Publications.
- MacDonald, M. Herbert, P. C., Regel, K. & Stanbrok, M. B. (2011). Working while sleep- deprived: Not just a

- problem for Residents. *Canadian Medical Association Journal*; Doc: 10.1503/cmaj. 110402.
- Mojoyinola, J.k. (2008). Effects of Job Stress on Health, Personal and work Behaviour of Nurses in Public Hospitals in Ibadan Metropolis, Nigeria. *Ethno-Med.*, 2(2),143-148.
- Nelson, D.L. and Baker, R.J. (2000). *Women, Work Stress and Health*. In Davidson, M.J. and Burke, R.J. (2000). *Women in Management: Current Research Issues Volume II*. London: Sage Publications.
- NIOSH, (2008). Exposure to Stress: Occupational Hazards in Hospitals. Department of Health and Human Services, Centers for Diseases Control and Prevention, National Institute for Occupational Safety and Health (NIOSH). Workplace Safety and Health, U.S.A.
- Paul, B. (2013). Stress and Psychological Disorders in Great Britain. Health and Safety Executive, UK. www.hse.gov.uk/statistics/causdis/stress/. Retrieved on 27th October 2022.
- Payne, S. & Walker, J. (1996). *Psychology for nurses and the caring professions*. Buckingham: Open University Press.
- Rice, V.H. (2000). *Theories of stress and relationship to health*. In Rice, V.H. (ed), Handbook of stress, coping, and health: Implication for nursing. Research, theory, and practice. London: Sage Publications.
- Robbins, S. (2001). *Organizational Behavior. 9th Ed*. New Jersey: Prentice Hall.
- Sanderson, C. (2004). *Health Psychology*. John Wiley and Sons.
- Selye, H. (1974) *Stress without Distress*. In F. Luthans, Organizational Behaviour (3rd Edition), Singapore.
- Selye, H. (1956). *The Stress of Life*. New York: McGraw-Hill.
- Schreuder, J., Roelen, C., Groothoff, J., Van der Klink, J., Mageray, N., & Pallesen, S. (2012). Coping styles relate to health and work environment of Norwegian and Dutch hospital nurses: A comparative study. *Nursing outlook*, 60, 37-43.
- <http://dx.doi.org/10.1016/j.outlook.2011.05.005>
- Steven, S. (2010). *Stress at Work*. Department of Health and Human Services. Public Health Service. Centers for Diseases Control and Prevention, National Institute for Occupational Safety and Health (NIOSH), U.S.A.
- Thompson, L., Griffiths, A. and Davison, S. (2000). Employee Absence, Age, and Tenure: A Study of Nonlinear Effects and Trivariate Models. *Work & Stress*. 14 (1),16-34.
- Wade, C. and Travis, C. (2003). *Psychology*, 7th ed. New Jersey: Prentice Hall.
- Wolf, H., & Goodell, H. (1968). Stress and Disease. In: Ryhal, P.C. and Singh, K., 1996, A study of Correlates of Job Stress Among University Faculty. *Indian Psychology. Rev.*, 46(1/2),20-26.
- Wright, P.M. & Noe, R.A. (1996). *Management of organizations*. Chicago: Irwin. Nigeria. *Ethno-Med.*,

2(2), 143-148.

Biu, Borno State. He can be reached at:
jacobantobidda@gmail.com. Orcid
Number: 0000 0001 6624 7813

- **Anto Bidda Jacob** is of the Department of Sociology, Nigerian Army University