CHRISTIAN SERVICE UNIVERSITY COLLEGE

SOURCES OF STRESS AMONG NURSES IN THE OPERATING ROOM, IT'S EFFECTS AND COPING STRATEGIES'

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DECLARATION

We declare that this project is our own work undertaken during the Bachelor of Science Nursing program at Christian Service University College under the supervision of Mrs. Theresa Sarpong. References cited have all been acknowledged.

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SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this dissertation was supervised in accordance with the guidelines on supervision laid down by Christian Service University College.

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ABSTRACT

The purpose of this study is to identify the sources of stress among nurses working in the operating room, its effects and coping strategies used to reduce stress. The study was conducted at Komfo Anokye Teaching Hospital (KATH). The study design is quantitative descriptive in nature and a non-probability sampling method was adopted in selecting a sample size of 30 nurses working at the various operating theatres at Komfo Anokye Teaching Hospital. The data collection instrument was a questionnaire structure in English and made up of both open and closed ended questions. The collected data was analyzed with SPSS 17-0 (Statistical Package for Social Sciences) and presented using frequency tables, bar charts and pie charts. The results of the study revealed that nurses working in the operating room did experience stress from different sources such as work overload and shortage of staff among others. Fatigue and reduction of performance were among the effects of stress identified and listening to music, radio and meditation were some of the coping strategies used by nurses working in the operating theatre. Based on the findings, it was recommended that the institution should employ more nurses into the operating room to help reduce work overload and thereby reduce the level of stress operating room nurses experience.

DEDICATION

We dedicate this piece of work to our families.

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All glory to Allah the most high for his guidance, protection, wisdom and the love he has shown us throughout this project. We wish to acknowledge the valuable advice and support of Mrs. Theresa Sarpong our project supervisor, whose input and sustaining support was valuable during the research process.

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INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The presence of workplace stress among nurses is considered as a cost factor on the health care organization in Ghanaian hospitals. This cost can involve absenteeism, diminished productivity, nursing turnover, short and long term disabilities, workplace accidents, emotional problem, clinical incompetence, direct medical, legal, and insurance fees (ILO, 2000).

Lazarus and Folkman (2002) defined stress as "any situation in which internal demands, external demands, or both, are appraised as taxing or exceeding the adaptive or coping resources of an individual or group". The situation that evokes stress is called the stressor and these are tension producing internal or external stimuli, agents or factors placing a demand upon the body and causing intensification of stress and disequilibrium.

Lazarus and Folkman (2002) defined coping as the cognitive and behavioral efforts exerted to manage external and/or internal demands, which are perceived as taxing to an individual. The function of coping is to manage or alter demands that occur externally or internally within the individual.

Monotonous work has not disappeared and for many operating room nurses, it is all too frequent that the work environment is where they spend most of their working hours performing activities that they perceive as demanding, constraining and other wise stressful. The question then is, are these nurses able to cope with the constant stress in their working environment? This study seeks to find answers to this question.

The study will be a quantitative descriptive study; using a non-probability sampling method of convenience sampling, a sample size of 30 nurses will be given a questionnaire comprising of both open and closed ended questions to elicit responses from them. The questionnaire was constructed in English language.

Stress is a common phenomenon that occurs in life, however, it is perceived differently by individuals. To some, it is a stimulant, while others perceive it as a depressant. An element of it is necessary for normal life, but stress surpassing personal coping limit is no longer perceived as a stimulant or challenge but as wear and tear resulting in accidents or accident prone behaviors, chronic fatigue and depression (Kantar, 2001)

According to Sullivan and Decker (2003) stress is subjective in nature, because an event or change that is stressful for one person may not be stressful for another and an event that produces stress at one time or place may not be stressful at another time and place. Thus when the degree of stress is equal to the degree of ability to accommodate or cope, the person is in a state of equilibrium. The individual performance at work and personal satisfaction is high and usually little or no harm occurs. On the other hand, when stress is greater than the ability to adjust, there is a problem of poor performance.

Aguocha (2011) further stated that, the nursing profession is linked with anxiety and that the hospital unit where the nurses work either amplifies or keeps under manageable control their anxiety level and manifestations. In his research "Gender and hospital units as indices of nurses' anxiety" Unpublished BSc. theses, University of Ghana; he concluded that; nurses work is in itself, inherently stressful and this has been expressed by many Ghanaian nurses; his study provided a great deal of evidence to support the conclusion that the levels of work stress experienced by nurses are unusually and especially high in incidence.

A Study of Work Related Depression, Anxiety and Stress of Nurses at Pantang Hospital in Ghana by Samuel Atindanbilaat the University of Ghana, Legon (Atindanbila, 2010) showed that the hospital unit where a nurse works was a predictor of stress. This implies that the levels of stress vary depending on whether the nurse works at the Operating room, Rehabilitation unit,

OPD or the ward. Further investigations showed that stress is higher at the rehabilitation and operating rooms compared to the other units.

1.2 STATEMENT OF PROBLEM

According to Lee (2003) Stress is recognized as an inherent feature of the work life of nurses, and growing evidence suggest that it may be increasing in severity. Work-related stress has been implicated as a major contribution factor to growing job dissatisfaction, rapid turnover, and high attrition rates among nurses. He also stated that stress has also been found to impact not only on nurses' health but also their abilities to cope with job demands. This seriously impairs the provision of quality care and the efficacy of health service delivery.

In nursing, stress of working nurses is a worldwide issue and its prevalence is high. Gray-Toft and James (2002) investigated the causes and effects of nursing stress in the nursing workplace setting. It was hypothesized that the sources and frequency of stress experienced by nursing staff were functions of the type of unit on which they worked, levels of training, trait anxiety, and socio-demographic characteristics. It was also hypothesized that high level of stress would result in decreased job satisfaction and increased psychological problems among nursing staff.

Nursing is characterized by exposure to a wide range of potentially stressful situations in the workplace. The sources of these stressors in the Nursing profession have been attributed to interactions with both patients and other nursing staff (McGowan 2001). According to RosseandRosse(2005) nurses have too many tasks to be done as compared to other professions. Working in long-term healthcare services, a stressful work environment, role conflict, an unequal position comparing to other healthcare professionals and limited staffing resources were all

related to job stress. Another major source is role conflict which refers to the incompatible demands from various role senders or from multiple roles held simultaneously.

Numerous studies conducted by McGowan 2001, Garrosa et al. 2008, Walker 2008 showed that nurses with high job stress exhibit decreased job satisfaction, lesser hospital commitment, increased absenteeism and turnover intentions. In addition, studies by Rosse and Rosse (2005) and Mohr and Puck (2007) suggest that high level of role conflict is related to lower job satisfaction, reduced organizational commitment and greater likelihood of turnover intention.

According to Berland et al. 2008 the negative effects of job stress on nurses have received increased attention in recent years. It has been found out that nurses who work in very stressful environments with minimal control and organizational interaction from colleagues may actually have a negative effect on patient safety. In addition, nurses with frequent job stress could experience numerous psychological and physical problems (Wong et al., 2001). These include anxiety and depression on them. These psychological problems have been found to be related to the demographic variables including nurses' age, gender, educational level and work-related variables (e.g. employment status, work schedule) have been discussed in relation to occupational burnout (Maslach et al. 2001:Piko 2006).

Stress has various consequences on both psychological and physiological status of the individual leading to either structural or functional changes or both (Sullivan and Decker, 2003). To them 70% of all physical illness such as peptic ulcer, hypertension, migraine, diabetes mellitus and arteriosclerosis are attributed to stress

This study aims at finding out the stress and coping strategies among Nurses at the operating room of Komfo Anokye Teaching Hospital in Ashanti Region of Ghana

1.3 OBJECTIVES OF THE STUDY

- To identify the factors that induces stress in the operating room nurses
- To find out the effects of stress on the operating room nurse and to assess it effects
- To identify measures that will mitigate stress in the operating room
- To assess the coping strategies of nurses in the operating room
- To find out if given the opportunity, they will like to change to another unit.

RESEARCH QUESTIONS

1. What are the factors that induce stress in the operating room?
2. What are the effects of stress on nurses working in the operating room?
3. What are the negative impacts of stress among nurse on the quality of care provided to clients?
4. What are the coping strategies of employed by nurses in dealing with stress?
5. Will operating room nurses like to change to other theatres?

HYPOTHESIS

Null Hypothesis

Stress among Ghanaian nurse is NOT caused by numerous factors.

Alternate Hypothesis

Stress among Ghanaian nurses is caused by variety of factors.

1.4 SIGNIFICANCE OF THE STUDY

The purpose of this study is to gain more information about nursing job stress, coping strategies, and the relationship between job stress and coping strategies through identifying factors contributing to stress in operating room nurses, the effects of stressors on nurses' health and the various coping strategies they employ.

Research on job stress and its coping strategies among nurses in Ghana are essential for both individuals and organizations. Although stress and coping strategies are very significant topics, very little research about this topic is available throughout the world. The present review of nursing literature has highlighted a dearth of studies addressing stress and copingstrategiesin nurses. This limits the ability to compare and synthesize findings.

These stressors can lead to poor health and affect daily functioning. Nurses also experience job dissatisfaction and report their intention to change profession as a result of work-related stress.

This study is aimed at identifying these stressors and ways of coping. It will also create a data base on the findings which can be adopted by the policy makers to lay a basic foundation for further extensive studies within hospitals in Ghana.

Finally it will improve nurse satisfaction, and reduce the problem of absenteeism, diminished productivity, nursing turnover, short- and long term disabilities, workplace accidents, emotional problem, clinical incompetence, direct medical, legal, and insurance fees.

1.5 OPERATIONAL DEFINITIONS

Stress: Is a reaction to a stimulus that disturbs our physical or mental equilibrium

Coping strategies: Refers to the perceptual, cognitive or behavioral responses used tomanage, avoid or control situations that could be regarded as difficulty

Operating Room Nurses: A qualified registered nurse who assists doctors in surgical procedures

Operating Room: A specially equipped room where surgical procedures are carried out.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter deals with related works on stress. Previous studies were reviewed from, articles, journals and books. The literature was reviewed under the following headings:

- Concept of stress
- Sources of Stress.
- The Effects of Stress
- Coping Strategies

2.1 CONCEPT OF STRESS

Stress is the body's reaction to a change that requires a physical, mental or emotional adjustment or response, Sullivan and Decker (2003). According to them Stress can come from any situation or a thought that makes you feel frustrated, angry, nervous, or anxious. Stress can simply be a fact of natural forces from the outside world affecting the individual however, the individual responds to stress in ways that affect him/her as well as their environment.

Kanter (2001) asserted that stress is a common phenomenon that occurs in life, however, it is perceived differently by individuals. To some it is a stimulant, while others perceive it as a depressant. An element of it is necessary for normal life, but stress surpassing personal coping limit is no longer perceived as a stimulus or challenge, but as wear and tear resulting in accidents or accident prone behavior, chronic fatigue and depression.

Stoner and Walker (1992) defines stress as tension and pressure that results when an individual views a situation as presenting a demand which threatened to exceed his or her capacities or

resources. Again, Sullivan and Decker (2003) quoted Steer's definition of stress as the reaction of an individual to a demand made from the environment that posed a threat. It is when two or more incompatible demands are made on the body that caused a conflict.

Different jobs have varied degrees of stress and it is generally accepted that a certain amount is essential to sustain life and also stimulate individuals to perfection. Thus, when a degree of stress is equal to the degree of the ability to accommodate or cope, the person is in the state of equilibrium (Sullivan and Decker, 2003). His or her performance at work and personal satisfaction is high and usually little or no harm will occur. On the other hand, when stress is greater than the ability to adjust, there is a problem of poor performance.

Smeltzer and Brenda (2009) also defined stress as a state produced by changes in the environment that is perceived as challenging, threatening, or damaging to the person's dynamic balance or equilibrium. The change or stimulus that evokes this state is the stressor.

According to Smeltzer and Brenda (2009), a stressor may be defined as an internal or external event or situation that creates a potential for physiologic, emotional, cognitive, or behavioral changes in an individual. They went on to mention that stressors exist in many forms and categories and may be described as physical, physiologic, or psychosocial. Physical stressors include cold, heat, and chemical agents; physiologic stressors include pain and fatigue. Psychosocial stressors are fear of failing an examination and losing a job or perhaps a patient dying on your shift. Stress is the body's instinctive reaction to an environmental change like meeting a sudden deadline.

In a related study, Wellker-Hood (2006) defined job stress as "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker." Stress itself is not necessarily damaging, some stress is good

and in fact necessary. Positive stress is referred to as eustress and can heighten and focus attention as well as increasing mental acuity. However, at some point the level of stress becomes too high and then no longer improves a person's performance but rather starts to impair his/her ability to meet the challenges the job presents (Wellker-Hood 2006).

2.2 SOURCES OF STRESS

According to Lee (2003) stress is recognized as an inherent feature of the work life of nurses, in particular, the job of nurses working in acute and specialized care units. Heavy workload, poor staffing, dealing with death and dying, inter-staff conflict, strain of shift work, careers, and lack of resources and organizational support have been identified as the major sources of job stress.

In a related study Stoner and Freeman (1992) indicated that the main source of stress is work overload, which could be qualitative and quantitative. In qualitative work overload, the individual lacks the skills or abilities to complete a job satisfactorily, while in quantitative work overload or role conflict, the individual has more than one work to complete at a time or in a given time. Other factors contributing to stress are organizational, interpersonal and individual factors. Organizational factors include the behavior of the supervisor where managers usually experience more stress because they are responsible for their staff, organization's welfare and other administrative roles. Meanwhile, the punitive and authoritative attitudes of managers could induce stress in the subordinates. Again, institutional factors such as norms, policies and expectations can be in conflict with the individual's values resulting in stress. Also, changing environment where any form of change such as change of staff, an office or technological changes brings pressure to the care-giver who makes an attempt to learn new ways of doing things.

Stoner and Freeman (1992) further indicated that Interpersonal factors also contribute to stress. For instance it is crucial in nursing to interact with various categories of people, including staff, clients or relatives of patients. As there are different grades of nurses, perceptions may differ which could result in conflicts and thus inducing stress. Interdisciplinary conflicts may also emerge when more than two therapists are providing care to a patient, because opinions may differ which could contribute to stress. In addition, sometimes individuals find themselves assuming multiple roles and these could be sources of stress, such as a nurse in-charge combining managerial roles with nursing duties which could lead to conflict of interest and work overload. Individual factors such as individual experience in life, such as marriage, change of work, retirement among others cause stress. Inequality of individual expectations and perception of performance can be frustrating.Stoner and Freeman (1992).

Similarly, Cocco et al (2003) divided stressors in the nursing profession into three categories, namely personal (or interpersonal), interpersonal and work environment or organizational stressors. Personal stressors include an inability to manage home, work and sometimes also study responsibilities and an inadequate preparation of personnel for the demanding tasks of nursing. Interpersonal stressors reflect on relationships with doctors, supervisors, other senior personnel and colleagues Work environment stressors include modern technology that is, in essence, inhumane and depersonalized.

To Cavanagh, (1997) a high work load and long working hours that do contribute to a personal and social life, procedures that endanger nurses' lives; caring for and especially dealing with pain, suffering and dying; the strain of being exposed to making mistakes and managing demanding responsibilities, a lack of autonomy role conflict and role ambiguity, and under-staffing are all factors leading to stress in the workplace.

Common equipment in the surgical suite includes the operating bed, diathermy machine, suction machine, anesthetic machine, operating lumps, an array of instrument sets etc.

The environment of the surgical theatre is high-tech; fast paced, its atmosphere is emotionally charged as perioperative nurses confront death and dying, end of life decisions, ethical dilemmas and interact frequently with distraught families. The physical work demands in surgical suite can be exhausting, requiring heavy lifting, long hours of standing and shift work. The sum of every task in the surgical suite in itself is a big source of stress to all perioperative nurses' (Collins 2006).

Kortum and Ertel, (2003) conducted a study on Psychological stress and well-being at work and asserted that stress is caused by a feeling of heavy responsibility towards patients, in addition, to the fact that the personnel are faced with various hazards in the course of their daily activities. Factors like strained family relations, burnout due to shift and night work, overtime work, contact with sick patients, especially when patients do not recover from the operation are stressors to the operating room personnel. Again, the health personnel find their job stressful, mainly because of the fast pace with which they have to keep up. Repetitive monotonous work has not disappeared, and in addition, having to work in poor working conditions, having to lift heavy patients and equipment, or working in painful positions is stressful. They further stated that for many operating room personnel, it is all too frequent that the work environment is where they spend most of their working hours; perform activities that they perceive as demanding, constraining, and otherwise stressful. Mental health problems and other stress-related disorders are recognized to be among the leading causes of early retirement from work and overall health impairment

2.3 THE EFFECTS OF STRESS

Work stress and burnout remain significant concerns in nursing, affecting both individuals and organizations. For the individual nurse, regardless of whether stress is perceived positively or negatively, the neuroendocrine response yields physiologic reactions that may ultimately contribute to illness (depression, heart attacks or ulcers) but can also lead to addictions as people try to relieve stress with alcohol or illegal drugs. Stress weakens the immune system and can cause the body to be unable to effectively fight illnesses. Stress has been regarded as an occupational hazard since the mid-1950s and in fact occupational stress has been cited as a significant health problem in most nurses' (Williams 2000).

In a related study, Milliken & Tillman (2007) asserted that stress causes the sympathetic nervous system to flood the body with cortisol and adrenaline; this constant triggering of the sympathetic nervous system can exhaust the body and lead to health problems These high levels of stress can lead to a myriad of physical symptoms: heart disease, migraines, hypertension, irritable bowel syndrome, muscle tension, back and joint pain and duodenal ulcers. In addition, high levels of stress can also lead to mental health problems such as depression, insomnia, anxiety and feelings of inadequacy.

The level of a nurse's stress will depend on her specialty and her general ability to handle stress. According to Bonnie (2001) there are many causes of stress in nursing at the surgical suite, such as understaffing of shifts, patient deaths, long hours, insufficient pay, difficult patients, paperwork and deadlines. Conflicts with other health care professionals such as a disagreement over patient treatment can also increase the stress level. Conflicting values between nurses, surgeons, and co-workers create additional tensions in the units. In addition to dealing with a

stressful occupation, nurses also have to deal with everyday stressors like having a baby or buying a house.

Langford (2006) stated that the effects of stress in the nursing profession can lead to forgetfulness which then translates into decrease in efficiency and effectiveness of perioperative nurses'. It can also undermine their relationship with co- workers on the job as stress can lead to conflict due to poor communication and anger at work. Long-term exposure to occupational stress can cause job burnout. Signs of burnout can include being unable to reasonably balance work and personal time, increased irritability with patients and co-workers, and a feeling of no job satisfaction.

According to Pipe et al (2009) chronic high levels of stress can lead to a depressed immune system, decreased cognitive functioning and ultimately even degenerative changes to the brain structures responsible for storing new information. They further said stress particularly affects high-level cognitive skills such as attention and memory, which are critical components in quality nursing care.

High levels of stress can lead to the phenomenon of burnout. Burnout is a feeling of being overworked, emotionally drained, and leads to lower productivity in both work and home life. Nurses find this syndrome of burnout to be a pervasive source of distress. Nurses who become burnout can also become cynical and exhausted leading to lack of patient care (Davies 2008).

Similarly, Sardiwalla (2007) stated that burnout is particularly common in the health care professions because of the emotional intensity of the relationships with their patients. He said physical symptoms of burnout include headaches, dizziness, insomnia, skin problems and gastrointestinal distress.

Stress has various consequences on health working environment. It could affect both physiological and psychological status of the person, leading to either structured or functional changes or both (Stoner and Freeman, 1992). To them 70% of all physical illness such as peptic ulcer, hypertension, migraine, diabetes mellitus and arteriosclerosis are attributed to stress. Again, psychological effects results in anxiety, fear, fatigue and low job satisfaction. It could also result in depression, leading to withdrawal from people, feeling of hopelessness, low self-esteem and sudden mood changes.

In addition, the individual could experience chronic stress which may predispose the individual to ineffective coping mechanisms such as poor performance at work, excessive use of alcohol and smoking, chemical and narcotic drug dependence, increased absenteeism and burnout syndrome which is characterized by exhaustion, feeling of being used up, and fatigue that is not relieved by rest or vacation. It includes a decreased sense of personal accomplishment and a feeling that the individuals actions do not matter.

In a study by Williams and Cooper (2002) they identified and listed some of the changes that may indicate that someone is suffering from stress. The researchers suggested that this could be a change in appearance, in behavior and in habits. In altered appearance, they mentioned changes such as lack of care in appearance, looking miserable, tired, nervous, and apprehensive and looking agitated. In altered behavior, there is irritability, aggression, mood swings, poor concentration, and poor decision-making and reduced performance. The researchers further indicated that altered habits resulted in eating more, eating less, drinking more, increased absence and more accident prone.

Similarly, Cartwright and Cooper (2003) suggested two types of symptoms of stress, such as individual and organizational symptoms. The researchers asserted that raised blood pressure,

depressed mood, excessive drinking, irritability, and chest pains are individual symptoms, while high absenteeism, high labor turnover, industrial relations difficulties and poor quality control are organizational symptoms encountered in response to stressors.

2.4 COPING STRATEGIES

Coping can be defined as the "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. Coping activities may be problem-focused in that they are directed externally and involve attempts to manage or change the problem causing the stress. On the other hand, coping activities may be emotion-focused in that they are internally directed and involve attempts to alleviate emotional distress.

According to Lazarus and Folkman (2002) problem-focused coping includes problem-solving activities, recognizing one's role in solving a problem and confronting the situation by using some degree of risk-taking behavior; while emotion-focused coping includes wishful thinking, avoidance of confrontive behavior, and detachment or disengagement from the situation. Individuals use both problem-focused and emotion-focused coping when dealing with stressful situations.

To Bhagat et al. (2001) the level of stress experienced and the extent to which adverse psychological and physiological effects of stress occur depend on how well the individual utilizes coping strategies in the organizational setting.

McElfatrick et al, (2000) defined coping as the cognitive and behavioral efforts that individuals make to manage situations appraised as potentially harmful or stressful. According to Fleishman (2005) coping could refer to either strategies or results. As a strategy, coping refers to the

different methods that individuals employ to manage their specific circumstances, while coping as a result refers to the eventual outcomes of the chosen strategy for the individual.

A study by Lazarus and Folkman (2002) identified and described eight coping strategies people use to contend with stress. These strategies tend to be either problem-focused or emotion-focused in nature. The eight strategies include:

Confrontive coping- is described as aggressive efforts to alter a situation that involve using some degree of hostility and risk-taking behavior

Distancing - is disengagement or detachment from a situation in an attempt to minimize the significance of the situation.

Self-control - involves efforts to regulate one's feelings and actions.

Seeking social support- involves efforts used to obtain informational, tangible and/or emotional support from others.

Accepting responsibility- recognizing one's role in solving a problem describes accepting responsibility.

Escape-avoidance- wishful thinking and behavioral efforts to avoid confronting a problem or stressful situation describes escape-avoidance.

Planful problem solving- involves efforts to alter the situation, including an analytic approach.

Positive reappraisal- is described as a spiritual dimension that includes giving positive meaning to a situation by focusing on one' personal growth experience.

Similarly, Levi (2001) asserted that coping responses can be described as positive or negative and as reactive (i.e. reacting to an individual's own thoughts and feelings) or active (dealing with actual stressful situations or events). Active or reactive coping responses can be positive or negative, depending on the situation and the content of the response.

He said that people tend to use a number of different coping approaches rather than just one. Positive coping strategy is learned techniques used by individuals to reduce tension stress, and anxiety; for example, deep breathing techniques, and relaxation exercises. These strategies can result in successful adaptation. In addition, they can be therapeutic and non-therapeutic. Therapeutic coping strategies usually help the person to acquire insight, gain confidence to confront reality, and develop emotional maturity. The coping process is an important aspect of the person-environment interface. The kinds of coping strategies used in a given situation are a function of individual differences in personality or experience as well as characteristics of the situation.

Stoner and Freeman, (1992) indicated that certain factors enable individuals respond positively to stress. These are personal style and personality, which deals with how an individual perceives, interprets and responds to stressful events. Those who perceive it as a challenge are able to cope positively than the others. They further said the social support received from families, colleagues and friends enables an individual to adjust to situations better than those who do not receive any support or help. Again, the constitutional status, which is the individuals physical and health status influence his or her ability to cope positively to a situation. A healthy person usually can withstand a stressful condition.

A person appraises and copes with changing situations. The desired goal is adaptation or adjustment to the change so that the person is again in equilibrium and has the energy and ability to meet new demands. This is the process of coping with the stress, a compensatory process with physiologic and psychological components. Adaptation is a constant, on-going process that requires a change in structure, function, or behavior so that the person is better suited to the environment; it involves an interaction between the person and the environment (Miller and Smith 2004).

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter deals with the type of research, the research setting, population and sampling technique. It also describes the tools and methods used for data collection, the validity and reliability, ethical consideration and limitations of the study.

3.1 RESEARCH DESIGN

A Quantitative descriptive research design was used. This design helped identify the sources of stress among nurses working in the operating room, its effects and coping strategies and the measure that could be used to reduce them.

3.2 RESEARCH SETTING

The study was conducted at KomfoAnokye Teaching Hospital which is located in Kumasi, Ashanti Region of Ghana. The hospital was established in 1952 and was upgraded to a teaching hospital in 1975.

The study was carried out at the Main Theatre, Accident and Emergency Theatre, Polyclinic Theatre and A1 Theatre of the Komfo Anokye Teaching Hospital

The main Theatre has five operating rooms and performs various elective and emergency surgical procedures such as, general surgery, urology and pediatric surgery. Accident and Emergency Theatre is used for neurosurgery, plastic surgery, trauma, orthopedic surgery and some general surgery as well, the theatre has four operating rooms and also performs both

emergency and elective surgeries. Polyclinic Theatre and A1 theatre has two operating rooms each and performs ENT and obstetric surgeries respectively.

3.3 TARGET POPULATION

The populations for the study were nurses working in Main, Accident and Emergency, A1 and Polyclinic Theatres of Komfo Anokye Teaching Hospital.

3.4 SAMPLE SIZE AND SAMPLING TECHNIQUE

A non-probability sampling method of convenience type was used in choosing a sample size of 30 for the study. This method was adopted because participants were selected based on their availability and willingness to take part in the study.

3.5 TOOLS AND METHODS OF DATA COLLECTION

Questionnaire was used in the data collection. Close and open ended questions were used. The questions were used in three sections. Section A: Demographic data of respondents Section B: Questions on concepts of stress. Section C: Question on sources of stress to nurses, Section D: Questions on the effects of stress and Section D: has questions on coping mechanisms and measures taken to reduce stress.

3.6 MODE OF ANALYSIS

Data collected was analyzed using SPSS 17-0 (Statistical Package for Social Sciences) and was summarized using tables, bar charts and pie charts.

3.7 VALIDITY AND RELIABILITY

The questionnaires were shown to our supervisor for correction in order to make the questions valid and reliable to carry the research. Furthermore, a pretest of five questionnaires was done at the main theatre to test the adequacy of the questions and some few corrections made after the pretest.

3.8 ETHICAL CONSIDERATION AND DATA COLLECTION

A letter of introduction from the Head of Nursing Department Christian Service University College and sent to the Nurses Manager of Surgery Department of KomfoAnokye Teaching Hospital to obtain permission to carry out the study in the various units. The nurses' consent was sought and confidential information was protected.

3.9 LIMITATIONS TO THE STUDY

We encountered a number of problems in carrying out this research. The major one was financial constraint which led to the small sample size of 30 used. Time constraint was also another problem we encountered in terms of combining work, lectures and completing the study on schedule.

CHAPTER FOUR

ANALYSIS OF DATA

4.0 INTRODUCTION

This chapter deals with the data analysis and the presentation of the results of the study. The findings were presented in the form of tables, pie charts, and bar charts. The findings were grouped under five (5) main headings namely:

- Demographic data
- Concepts of stress
- Sources of stress
- Effects of stress and
- Coping strategies used to reduce stress

4.1 DEMOGRAPHIC DATA OF RESPONDENTS

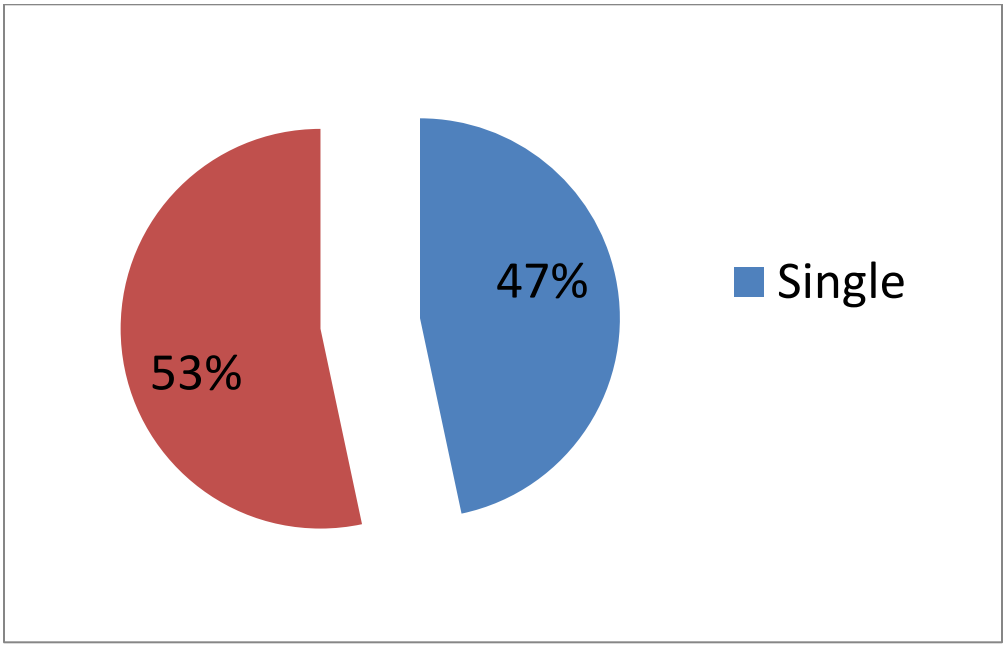

Figure 1: Marital status of Respondents

Findings in Figure 1 showed that the majority 16 (53%) of the respondents were single, while 14 (46.7%) were married.

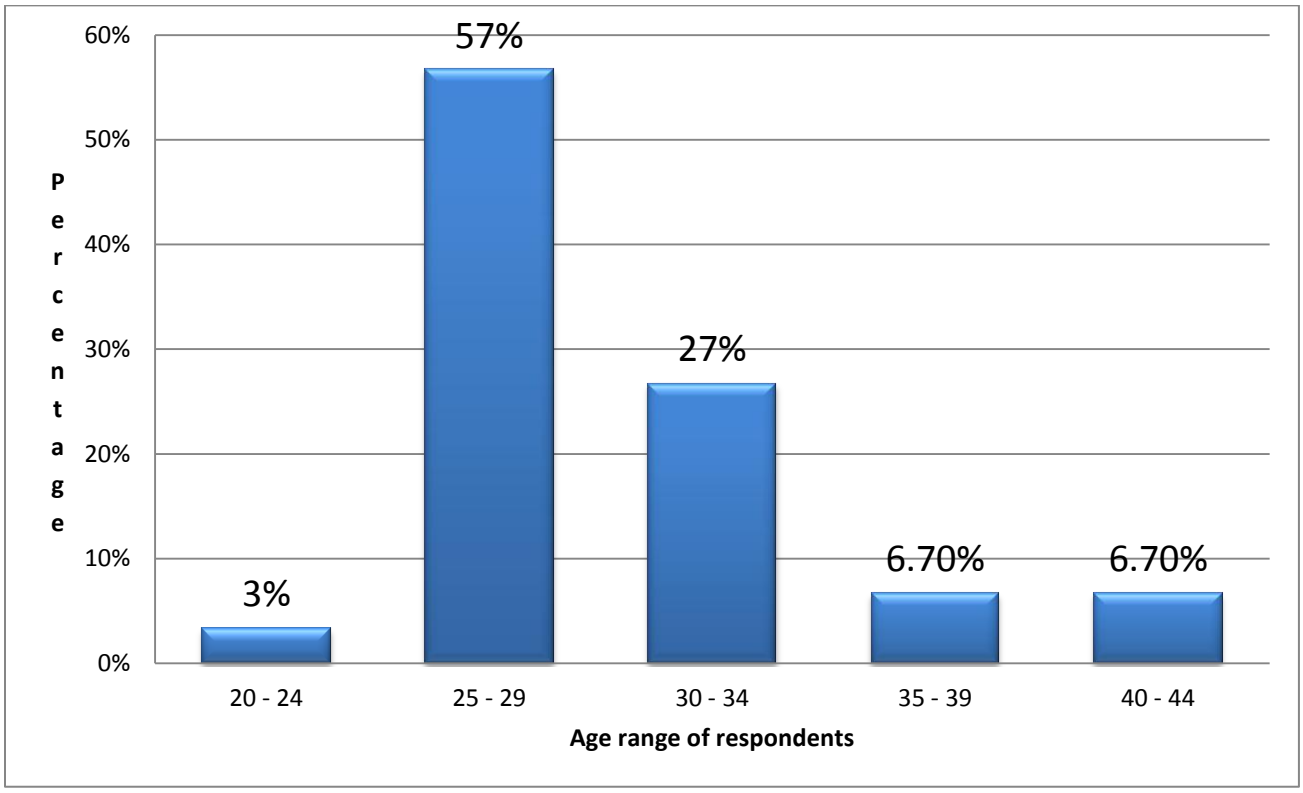

Figure 2: Age of respondents

In Figure 2; a majority of 17 (57%) of the respondents were between the ages of 25-29, and 8 (27%) were between 30-34 years. There were 2 respondents representing 6.7% of the total sample whose ages were between 40-44 years as well as, 2 (6.7%) respondents having their ages between 35-39 years. The minority group was 1 (3%) respondent between the ages of 20-24 years.

Table 1: Rank of Respondents

Rank	Frequency	Percentage (%)
Staff Nurse	10	33.3
Senior Staff Nurse	12	40.0
Nursing Officer	4	13.3
Senior Nursing Officer	1	3.3
Principal Nursing Officer	3	10.0
Total	**30**	**100**

With respect to the rank of the respondents the majority 12 (40%) were senior staff nurses, and 10 (33.3%) respondents were staff nurses. There were 4 nursing officers representing 13.3%, 3 respondents representing 10% were principal nursing officers and those in the minority was 1 nursing officers representing 3.3% as presented in table 2 above.

Table 2: Years in Service

Years in Service	Frequency	Percentages (%)
1 – 5	22	73.3
6 – 10	5	16.7
11 – 15	2	6.7
6 months	1	3.3
Total	**30**	**100**

With regards to the number of years in service in their units, data collected indicated that 22 (73.3%) of the respondents had served between 1-5 years, another set of 5 (16.7%) have served for 6 – 10 years, while 2 (6.7%) have served in their unit for 11 – 15 years. However 1(3.3%) respondent has served for only 6months.

4.2 CONCEPTS OF STRESS

Response to what the respondents think what stress is

With respect to what stress is, respondents explained stress in their own words. To 9 respondents representing 30%; stress is an emotional or physical pressure on an individual as a result of a pressing situation leading to worrying, tension, extreme fatigue and dizziness. Another set of 7 respondents representing 23.3% defined stress as an undesirable condition that one encounter or an event that cause an inconvenience to the individual. Another 2 (6.7% of respondents) said stress is an undesirable situation which makes people uncomfortable and have burn out while 8 respondents representing 26.7% stated that, stress is any factor of mental or physical pressure which adversely affect the physiological functioning of the body. However 4 (13.3%) respondents defined stress as discomfort associated with work which usually makes one feel exhausted, have insomnia and anxiety among others.

Table 4: Response to whether their work is stressful

Response	**Frequency**	**Percentage (%)**
Yes	30	100
No	0	0
Total	**30**	**100**

All 30 respondents representing 100% said their work is stressful

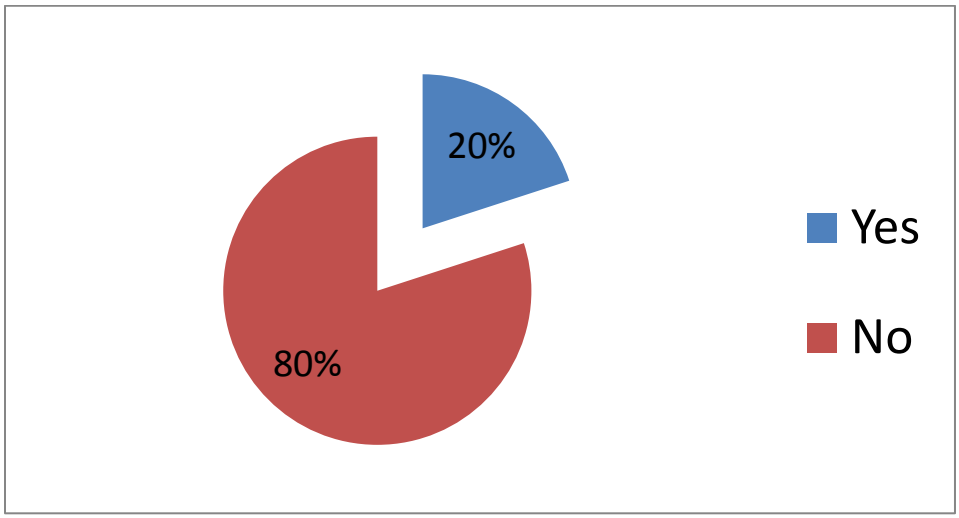

Figure 3: Response on adequate working equipment

The results in figure 3 indicated that 6 (20%) of the respondents had enough equipment to work with while 24 (80%) of the respondents forming the majority said No

Table 5: Response on adequate number of staff

Response	**Frequency**	**Percentage (%)**
Yes	2	6.7
No	28	93.3
Total	**30**	**100**

Majority of the respondents, 28 (93.3%) said the number of staff at post is inadequate for the work while 2 (6.7%) said otherwise. This is presented in table 5 above.

Table 6: Response to number of extra hours worked after normal working hours

Number of hours	Frequency	Percentage (%)
30mins – 59mins	10	33.3
1hours – 2 hours	14	46.7
Above 2 hours	6	20
Total	**30**	**100**

In response to the number of extra hours worked after normal working hours, 10 respondents representing 33.3% stated they work between 30 – 59 minutes extra. 14 respondents (representing 46.7%) indicated they work between 1 – 2 hours extra while 6 respondents (representing 20%) said they work above 2 hours extra after their normal working hours.

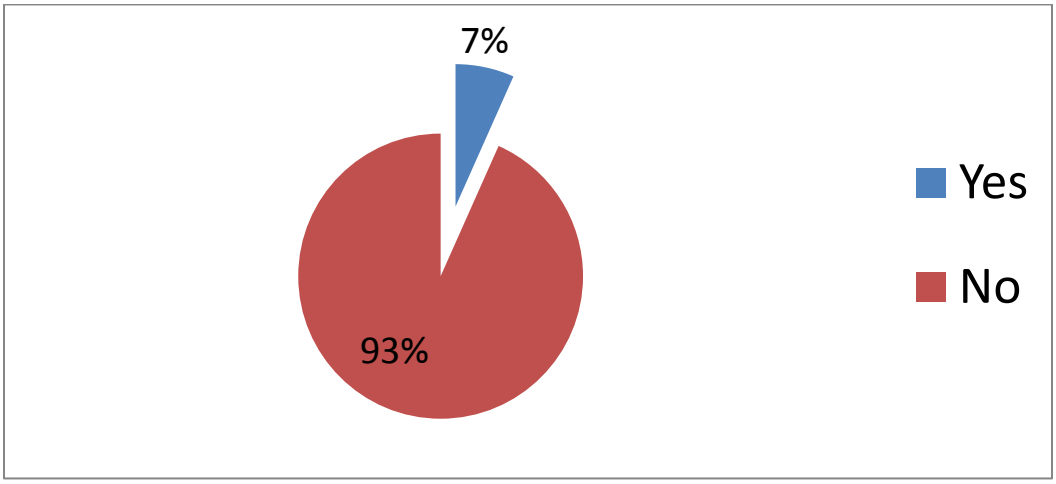

Figure 4: Response to whether they get paid for extra hours worked out of normal working hours

28 respondents representing a majority of 93% indicated that they don't get paid for working extra hours, 2 (7%) of the respondents indicated they are paid for extra hours.

4.3 SOURCES OF STRESS

Table 7: Response to whether respondents go on break and why if answered No

Response	Frequency	Percentage (%)
Yes	4	13.3
No	26	86.7
Total	30	100

Table 7 above indicated that 26 of the respondents representing 86.7% do not go on break during working hours, out of this number, 20 of them gave huge workload as the reason while 6 of them attributed it to continuity of work. Meanwhile 4 of the respondents representing 13.3% indicated they do go on break.

Table 8: Response to average number of operations respondents assist in performing in a day

Response	Frequency	Percentage (%)
2	3	10
3	11	36.6
4	5	16.7
5	5	16.7
6	4	13.3
More than 6	2	6.7
Total	30	100

Responses obtained and tabulated above revealed that 11 (36.6%) respondents assists in 3 surgeries in a day when on duty. A set of 5 (16.7%) respondents each assist in 4 and 5 surgeries per day respectively. Also 4 (13.3%) respondents assisted in performing 6 surgeries per day. According to 3 (10.0%) of the respondents, they assist in 2 surgeries. However, 2 (6.6%) of the respondents indicated they assist in performing more than 6 surgeries per day

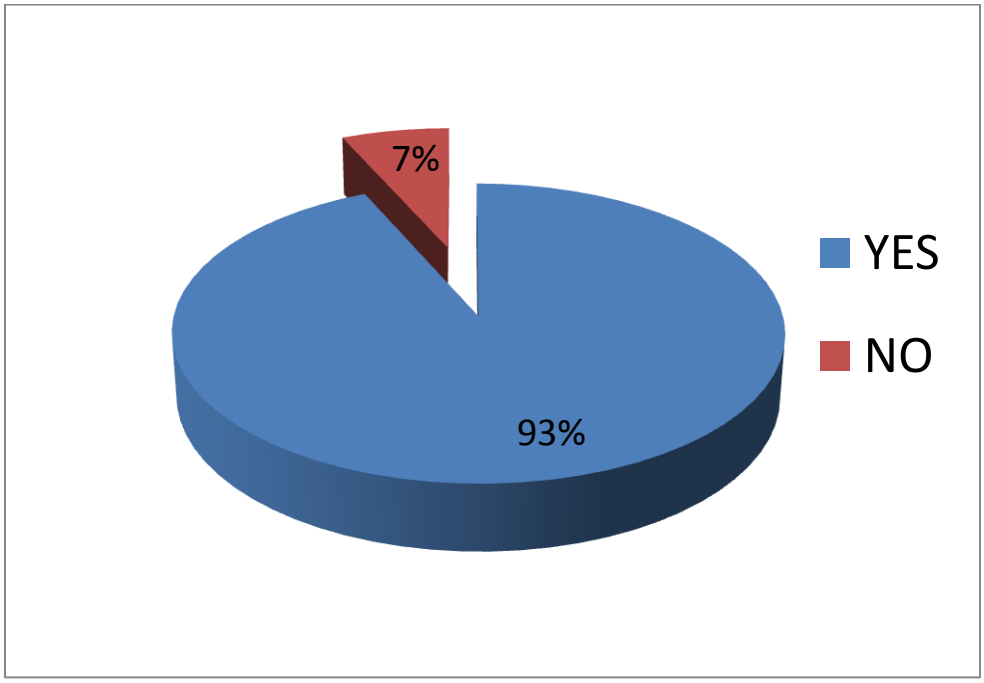

Figure 5: Response to whether respondents feel strained at the end of operations

The results in Figure 5 above indicated 28 (93%) feel strained at the end of operations while 2 (7%) of the respondents answered they do not feel strained.

Table 9: Response on situation that poses stress

Response	Frequency	Percentage (%)
Work overload	20	66.7
Staff shortage	22	73.3
Inadequate supplies	13	43.3
Lack of organization support	11	36.7
Lifting of patients and equipment	10	33.3
Organizational policy	7	23.3
Strain of shift work	12	40.0
Lack of autonomy	5	16.7
Poor working conditions	8	26.7
Repetitive monotonous work	6	20.0
Working in painful postures	8	26.7

On the question of situations that induces stress in the theatre, the respondents gave various answers. 22 (73.3%) of the respondents selected staff shortage, 20 (66.7%) selected work overload, 13 (43.3%) choose inadequate supplies. To 12 (40.0%) of the respondents, it was strain of shift work, however 11 (36.7%) of respondents selected lack of organizational support. 10 (33.3%) selected lifting of patients and equipment, 8 (26.7) answered poor working conditions and working in painful posture respectively. To 7 (23.3%) of the respondents organizational policies poses stress in the theatre while 6 (20.0%) and 5 (16.7%) selecting repetitive monotonous work and lack of autonomy as the situation that poses stress in the theatre.

Table 10: Response to most frequent source of stress

Response	Frequency	Percentage (%)
Work overload	8	26.7
Staff shortage	12	40.0
Inadequate supplies	4	13.3
Repetitive monotonous work	3	10.0
Lifting of patients and equipment	1	3.3
Strain of shift work	2	6.7

With respect to the most frequent situation that induces stress, 12 (40.0%) answered staff shortage, 8 (26.7%) said work overload, 13 (43.3%) indicated inadequate supplies. Another set of 4 respondents representing 13.3% said inadequate supplies. To 3 (10.0%) repetitive monotonous work is the frequent whilst 2 (6.7%) said strain of shift work and 1 (3.3%) respondent indicated lifting of patients and equipment.

Table 11: Response to most stressful situation

Response	Frequency	Percentage (%)
Work overload	14	46.7
Staff shortage	12	40.0
Inadequate supplies	4	13.3

In responding to the most stressful situation in the theatre, 14 (46.7%) of the respondents being the majority selected work overload. To 12 (40.0%), its staff shortage, however 4 (13.3%) indicated inadequate supplies.

With respect to other factors that factors that caused stress in the theatre, 10 (33.3) of the respondents said inadequate staff per shift, 6 (20.0%) respondents indicated lack of teamwork and to 4 (13.3%) others ineffective communication among team members. Also 2 (6.7%) reported lateness to work and technological changes. To 5 (16.7%) respondents, conflict among team members is a factor that induce stress, 3 (10%) said standing for long hours during surgeries. 1 (3.3%) however stated inadequate number of operating rooms while 5 (16.7%) did not give any response to the question.

4.3 EFFECTS OF STRESS

Table 12: Response on effects of stress

Response	**Frequency**	**Percentage (%)**
Depression	2	6.7
Fear	1	3.3
Reduced performance	18	60.0
Migraine	9	30.0
Forgetfulness	8	26.6
Insomnia	8	26.6
Irritability	13	43.3
Mood changes	15	50.0
Anxiety	7	23.3
Fatigue	23	76.6

From table 12 above 8 (26.7%) of the respondents said stress led to insomnia and forgetfulness. Again, 7 (23.3%) said anxiety, 23 (76.6%) said fatigue and 15 (50%) stated mood changes. Also

13 (43.3%) respondents indicated irritability and 1 (3.3%) said fear was an effect. However 9 (30.0%) selected migraine, 2 (6.7%) and 18 (60%) said depression and reduced performance respectively.

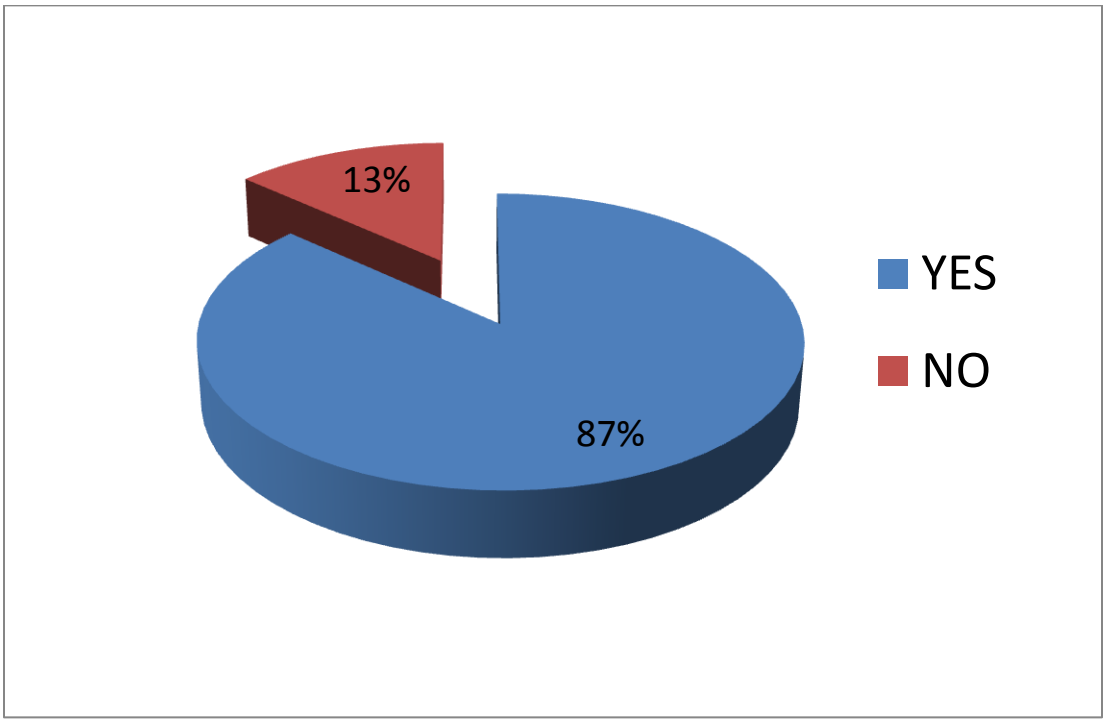

Figure 6: How often respondents reported sick at work.

The results in figure 6 above showed that majority of the respondents 26 (87%) responded "Yes" indicating that, they did report sick often while 4 (13.0%) said otherwise.

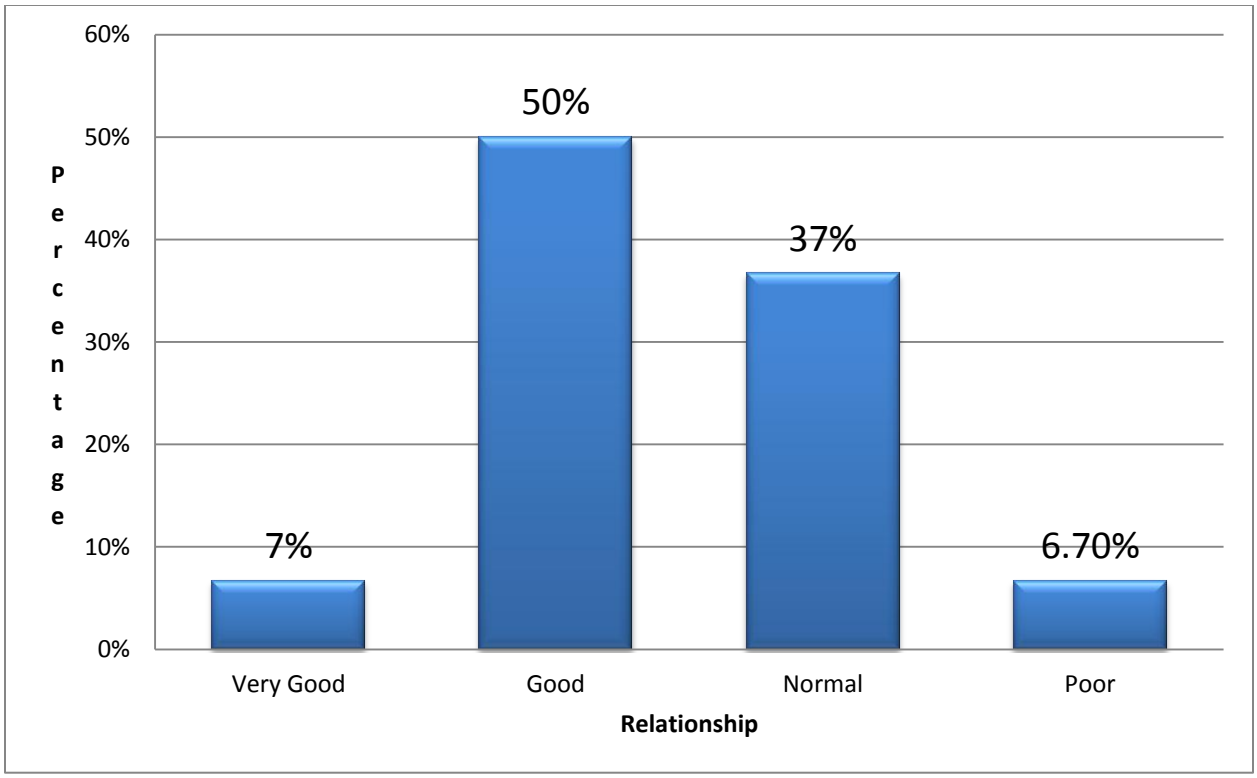

Figure 7: Response to how staff relate with their supervisor

From figure 7 above 15 (50%) of the respondents forming majority indicated that they have a good relationship with their supervisor while 11 (37%) indicted they had a normal relationship. Another set of 2 (6.7%) indicated they have very good relationship with the same number of 2 (6.7%) indicating they have a poor relationship.

4.5 COPING STRATEGIES

Table 13: Response on coping strategies used

Response	Frequency	Percentage (%)
Listening to radio	23	76.6
Watching television	20	66.6
Smoking	1	3.3
Drinking alcohol	1	3.3
Eating more	4	13.3
Eating less	1	3.3
Deep breathing exercise	13	43.3
Using narcotic drugs	0	0

With respect to coping strategies used, the above table relieved that, 23 (76.6%) of the respondents said they listened to radio when stress up, another set of 20 (66.6) per indicated they watch television to cope with stress, 1 (33.3%) each said they smoke, drink alcohol and ate less when stressed up respectively. To 4 (13.3%) respondents they eat more to cope to stress, 13 (43.3%) stated they use deep breathing exercise when they are stress up. None of the respondents used drugs when stressed up.

Table 14: Response on other coping strategies used

Response	Frequency	Percentage (%)
Sleeping	4	13.3
Resting	6	20.0
Praying	6	20.0
Meditation	6	20.0
Going for outings	3	10
Charting with friends	4	13.3
Taking a vacation	3	10.0
Moving away from the stressor	3	10.0
Reading	2	6.7
Swimming	2	6.7
Chasing women	1	3.3

In terms of other coping strategies used, two (2) sets of 4 (13.3%) of the respondents each used sleeping and chatting with friends respectively to cope with stress, three (3) sets of 6 (20%) respondents each said they used resting, praying and meditation to cope with stress. Another three (3) sets of 3 (10.0%) respondents each indicated going for outings, taking a vacation and moving away from the stressor as other ways of coping with stress. Two sets of 2 (6.7%) respondents each said they swim or read books to cope with stress, however 1 respondent representing 3.3% use chase women to cope with stress.

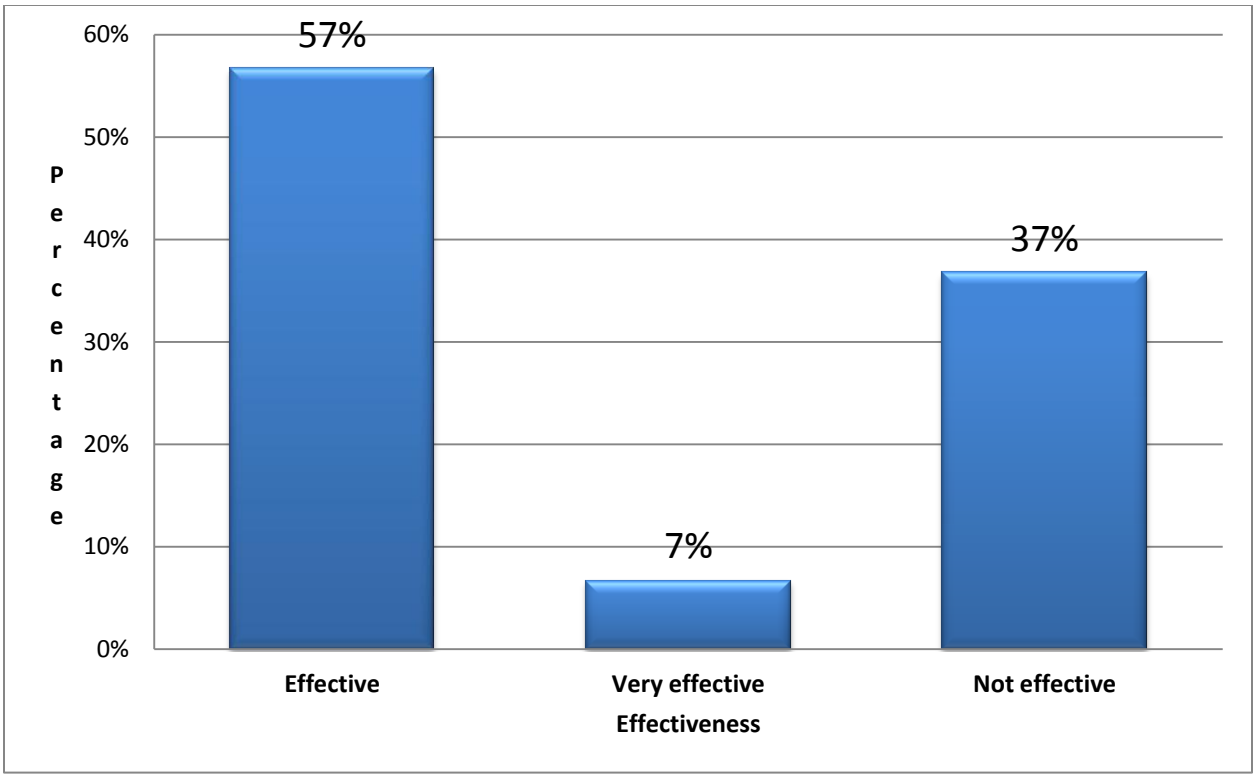

Figure 8: Response to effectiveness of strategy used

In responding to how effective the coping strategy they use is, 17 (57%) of the respondents said the coping strategy they use is effective, 2 (7.0%) said their coping strategy is very effective while 11 (37.0%) answered the strategy they use is not effective.

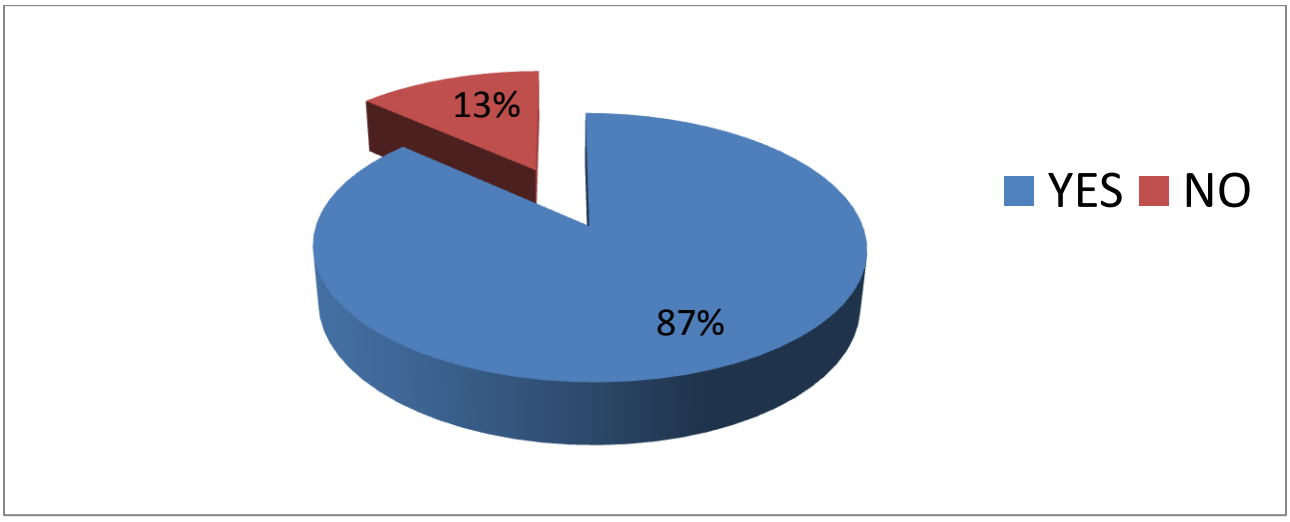

Figure 9: Relationship between years of service in the theatre and ability to cope with stress

When respondents were asked if they think the number of years one had worked in the theatre can influence the way he/she coped with stress, 26 (87%) indicated Yes and 4 (13%) indicated No. This is represented in figure 9 above.

Table 15: Opinion to change from theatre to another unit

Response	**Frequency**	**Percentage (%)**
Yes	11	36.7
No	19	63.3
Total	30	100

The findings as presented in table 15 above revealed that 19 (63.3%) of the respondents would prefer to stay in the theatre while 11 (36.7%) of the respondents would like to change.

When asked to give suggestions as to what the institution could do to reduce stress in the operating room, 26 (86.7%) of the respondents stated if the authorities could deploy more staff into the operating room to reduce work load. Again needed equipment, supplies and logistics should be provided. They also stated need for good interpersonal relationship between staff and their supervisors.

To 10 (33.3%) others the institution should provide motivation and incentives and improve on working conditions. However 15 (50%) respondents stated that faulty equipment should be replaced and lifting aids provided.

The respondents believe these opinions, when taken into consideration will help reduce stress in the operating room and thus will help the operating room nurses to work satisfactorily.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 INTRODUCTION

This chapter focuses on the discussion, interpretation of findings, conclusion and recommendations. The study examines source and effects of stress on nurses working in the operating theatre and coping strategies used.

The findings were discussed under the following headings:

- Demographic data of respondents
- Concept of stress
- Sources of stress
- Effects of stress and
- Coping strategies used to reduce stress

5.1 DEMOGRAPHIC DATA OF RESPONDENTS

The data collected from the study revealed that majority of the respondents 21 (70%) were females and 9 (30%) were males which indicated that nurses working in the operating room were dominated by females. 16 (53%) of nurses sampled were single with 14 (47%) being married. All the respondents were aged between 20-44 years indicating a young and energetic group working in the operating room. In view of their rank, 10 (33.3%) respondents were staff nurses and 12 (40%) were senior staff nurses. Another set of 4 (13.3%) respondents were nursing officers and 1 (3%) was a senior nursing officers.

However only 3(10%) were principal nursing officers. With respect to years in service, findings revealed that most of the respondents have been in the operating theatre for the minimum of 6

months, while some had worked for between 11-15 years and this could influence the ways they perceived stress and the coping strategies adopted as suggested by Lazarus and Folkman (2002). The research showed that even though most respondents with high years of experience indicated their work was stressful they however indicated they will stay if given the chance to change units.

5.2 CONCEPTS OF STRESS

Smelter and Brenda (2009) defined stress as a state produced by changes in the environment that is perceived as challenging, threatening, or damaging to the person's dynamic balance or equilibrium. This was supported with the findings of the study as all the 30 (100%) respondents were able to explain stress in their own words. The level of a nurse's stress will depend on her specialty and her general ability to handle stress.

As to whether their work is stressful, all the respondents stated yes. Evidently, all the nurses' working in the operating room had experienced stress before and were able to state some signs and symptoms such as insomnia, headache, confusion, pyrexia and tack of appetite, which confirmed what Lee (2003) stated that stress is an inherent feature of the work life of nurses working in specialized care unit, as well as consistent to Bonnie (2001) study which stated that there are many causes of stress in nursing at the surgical suite such as under staffing of shifts, patient deaths, long hours, insufficient pay, difficult patients, paperwork and deadlines.

Conflicts with otherhealth care professionals such as disagreement over patient treatment could also increase the stress level. Conflicting values between nurses, surgeons and co-workers creates additional tensions in the units.

5.3 SOURCES OF STRESS

On the question of situations that induces stress in the theatre, the respondents gave various answers. 22 (73.3%) of the respondents selected staff shortage, 20 (66.7%) selected work overload, 13 (43.3%) choose inadequate supplies. To 12 (40.0%) of the respondents, it was strain of shift work, however 11 (36.7%) of respondents selected lack of organizational support. These were some of the situations inducing stress confirming the assertion by Lee's (2003) study which pointed out that, heavy work load, poor staffing, strain of shift work, and lack of organizational support were major sources of job stress

However, 10 (33.3%) selected lifting of patients and equipment, 8 (26.7%) answered poor working conditions and working in painful posture respectively. To 7 (23.3%) of the respondents organizational policies poses stress in the theatre while 6 (20.0%) and 5 (16.7%) selecting repetitive monotonous work and lack of autonomy as the situation that poses stress in the theatre. This also confirmed Kortum and Ertel's, (2003) study which stated that health personnel find their job stressful, mainly because of the fast pace with which they have to keep up. Repetitive monotonous work has not disappeared, and in addition, having to work in poor working conditions, having to lift heavy patients and equipment, or working in painful postures is stressful. They further stated that for many operating room personnel, it is all too frequent that the work environment is where they spend most of their working hours; performing activities that they perceive as demanding, constraining, and otherwise stressful.

5.4 EFFECTS OF STRESS

When respondents were asked to state the effects stress had on them, 8 (26.7%) of the respondents said stress led to insomnia and forgetfulness. Again, 7 (23.3%) said anxiety, 23

(76.6%) said fatigue and 15 (50%) stated mood changes. Also 13 (43.3%) respondents indicated irritability and 1 (3.3%) said fear was an effect. However 9 (30.0%) selected migraine, 2 (6.7%) and 18 (60%) said depression and reduced performance respectively.

These findings confirmed the study by both Stoner and Freeman, (1992) who said that stress had various consequences on health working environment. It could affect both physiological and psychological status of the person leading to either structured or functional changes. To them 70% of all physical illness such as peptic ulcer, hypertension, migraine, diabetes mellitus and arteriosclerosis were attributed to stress. Again, psychological effects resulted in anxiety, fear, fatigue and low job satisfaction. It could also result in depression, leading to withdrawal from people, feeling of hopelessness, low self-esteem and sudden mood changes.

In addition, the individual could experience chronic stress which may predispose him/her to ineffective coping mechanisms such as poor performance at work, excessive use of alcohol and smoking, chemical and narcotic drug dependence, increased absenteeism and burnout syndrome which is characterized by exhaustion, feeling of being used up, and fatigue that is not relieved by rest or vacation. It included a decreased sense of personal accomplishment and a feeling that the individuals actions did not matter.

5.5 COPING STRATEGIES

Levi (2001) asserted that coping responses can be described as positive or negative and as reactive or active. He said that people tend to use a number of different coping approaches rather than just one. Positive coping strategy for example, deep breathing techniques, and relaxation exercises is learned techniques used by individuals to reduce tension, stress, and anxiety; which could result in successful adaptation.

The findings from this study supported his assertion because when respondents were ask which coping strategies they used when stressed up, 23 (76.6%) of the respondents said they listened to radio when stress up, another set of 20 (66.6%) indicated they watch television to cope with stress, 1 (33.3%) each said they smoke, drink alcohol and ate less when stressed up respectively. To 4 (13.3%) respondents they eat more to cope to stress, 13 (43.3%) stated they use deep breathing exercise when they are stress up. None of the respondents used drugs when stressed up.

On other coping strategies used, it was revealed that, two (2) sets of 4 (13.3%) of the respondents each used sleeping and chatting with friends respectively to cope with stress, three (3) sets of 6 (20%) respondents each said they used resting, praying and meditation to cope with stress. Another three (3) sets of 3 (10.0%) respondents each indicated going for outings, taking a vacation and moving away from the stressor as other ways of coping with stress. Two sets of 2 (6.7%) respondents each said they swim or read books to cope with stress, however 1 respondent representing 3.3% use chase women to cope with stress.

These findings confirmed Stoner and Freeman's (1992) study which indicated that certain factors enabled individuals respond positively to stress. These are personal style and personality, which dealt with how an individual perceived, interpreted and responded to stressful events. Those who perceived it as a challenge are able to cope positively than the others. They further said the social support received from families, colleagues and friends enabled an individual to adjust to situations better than those who did not receive any support or help.

The findings also revealed that, the number of years one had practiced in the operating room influenced his/her ability to cope with stress. On the question of changing of units, 19 (63.3%) of the respondents would prefer to stay in the theatre while 11 (36.7%) of the respondents would

like to change. With regards to suggestions on what the institution should do to help reduce stress, 26 (86.7%) respondents stated that there should be provision of needed equipment, supplies, and logistics. Again the authority should employ more competent staff into the operating room by training more perioperative nurses.

5.5 RECOMMENDATIONS

The following recommendations were made based on the findings.

- More staff should be employed into the operating room to reduce work overload.
- Hospital authorities should make available necessary equipment and gadgets needed to make work easier and comfortable.
- Management must provide staff with adequate logistics, supplies and resources.
- Faulty and spoilt instruments should be replaced.
- There should be rest periods during working hours in the theatre.
- Hospital authority should make provision for long term job security and promotion.

5.6 CONCLUSION

The study explored the impact of stress on the work output of the operating room nurses' and their ability to deliver quality healthcare services. The studies revealed that all the nurses' working in the operating room had experienced stress before and were able to state signs and symptoms of stress which included insomnia, headache, confusion, pyrexia and lack of appetite and binge eating.

The study revealed that there are numerous stressors in the operating room which included inadequate staff, work overload, heavy lifting, long hours of work and shift work. As a result

some nurses' made mistakes on the job and also, stress undermined the relationship existing among members of the operating team leading to confrontations.

Different coping strategies were adopted by respondents to cope with stress and these included listening to music, watching television, praying, eating more or less among others. The basic concept is that stress relates both to an individual's perception of the demands being made on them, and to their perception of their capability to meet those demands. A mismatch will mean that an individual's stress threshold is exceeded, triggering a stress response. Assessing stress is likely to be very difficult in an occupation as diverse and challenging as health care, yet the effectiveness of organizational interventions to reduce or eliminate sources of stress is of great importance.

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APPENDIX

QUESTIONNAIRE

Dear respondent,

We are students of Christian Service University College Nursing Department conducting a study on stress and coping strategies by nurses in the operating room.

Thank you for accepting to be part of this exercise. It is purely for academic reasons and any information provided will be treated confidential. You are assured that the information you will provide will be solely used for the purpose of this study.

INSTRUCTION

Please tick [√] or write in the appropriate spaces provided

SECTION A: PERSONAL DATA

1. Gender

Male [ ] Female [ ]

2. Marital status

Married [ ] Single [ ]

3. Age

20-24 [ ] 25-29 [ ]

30-34 [ ] 35-39 [ ]

40-above [ ]

4. Rank

SN [ ] SSN [ ]

NO [ ] SNO [ ]

PNO [ ]

5. How long have you been working in the operating room

1-5 years [ ] 6-10 years [ ]

11-15 years [ ]

Other……..

SECTION B: CONCEPT OF STRESS

6. In your opinion, what would you say stress is?

……

……

7. In your opinion, is your work stressful?

Yes [ ] No [ ]

8. Do you have enough equipment to work with?

Yes [ ] No [ ]

9. Do you think the number of staff at post is adequate for the work you do?

Yes [ ] No [ ]

10. How many extra hours do you have to work after your normal duty?

……

……

Do you get paid for extra hours?

Yes [ ] No [ ]

SECTION C: SOURCES OF STRESS

11. Do you go on break during working hours?

Yes [ ] No [ ]

If answered No to the above question, why?

……

……

……

12. On average how many operations do you assist in performing in a day?

……

……

……

13. Do you feel strained at the end of these operations?

Yes [ ] No [ ]

14. Please indicate any of the situations listed below that you think poses stress in the theatre

Work overload [ ] Strain of shift work [ ]

Staff shortage [ ] Lack of autonomy [ ]

Inadequate supplies [ ] Poor working conditions [ ]

Lack of organizational support [ ] Repetitive monotonous work [ ]

Lifting of patients and equipment [ ] Working in painful postures [ ]

Organizational policies [ ]

15. Which one of the situations selected above do you consider as most frequent and which is the most stressful? Please indicate below

Most frequent ……

Most stressful ……

16. State other factors that induces stress in the theatre

……

……

……

SECTON D: EFFECTS OF STRESS

17. Which of these does your stress lead to?

Depression [ ] Forgetfulness [ ] Anxiety [ ]

Fear [ ] Insomnia [ ] Fatigue [ ]

Reduced performance [ ] Irritability [ ]

Migraine [ ] Mood changes [ ]

18. Do you often report sick at work?

Yes [ ] No [ ]

19. How will you describe your relationship with your supervisor?

Very good [ ] Good [ ]

Normal [ ] Poor [ ]

SECTION E: COPING STRATEGIES

20. In your opinion, what are coping strategies?

……

……

21. Which coping strategies do you use when you are stressed up?

Listening to radio	[ ]	Eating more	[ ]
Watching television	[ ]	Eating less	[ ]
Smoking	[ ]	Deep breathing exercise	[ ]
Drinking alcohol	[ ]	Using narcotic drugs	[ ]

22. State other coping strategies used

……...…….

……

23. How effective is the strategy you use?

Effective [ ] Very effective [ ] Not effective [ ]

24. Do you think the number of years one had worked in the theatre can influence the way he/she cope with stress?

Yes [ ] No [ ]

25. If you are given the opportunity to change to another unit, will you change?

Yes [ ] No [ ]

26. What do you think the institution should do to reduce stress in the theatre?

……

……

……