STRESS FACTORS, CONSEQUENCES AND COPING MECHANISMS OF MEDICAL STAFF: THE CASE OF ARSI ZONE, CENTRAL ETHIOPIA

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COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCES

DEPARTMENT OF PSYCHOLOGY

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Abstract

Stress is subjective experience and a complex phenomenon. Typically, it describes as a negative concept that can have an impact on one's mental and physical wellbeing. Job stress among healthcare staff is becoming a common phenomenon in most health services. Medical staff focuses on activities related to diagnosis and treatment of human responses to health and illness. Hence, this study, tried to figure out factors that contribute to stress, consequences and coping mechanisms among medical staff members in Arsi zone, Oromia national regional state. The researcher employed cross-sectional study design. Medical staffs of three selected hospital of Arsi zone were the source of the study population. 240 medical staffs were taken employing simple random sampling technique. Quantitative types of data were collected using a questionnaire consisted of different scales. Descriptive (frequency and percentage) and inferential statistical analyses (chi-square) were used to analyze the data. Shortage of medical staffs, pressure from family as a result of working long hours, and working on holidays were the major source of stress. Exhaustion and low level of job satisfaction were reported as the major consequences of stress. As well as Relaxation and sleeping were reported as major coping strategies. Providing continuous and appropriate recognitions to meet the social and personal priorities of medical staff members into the formal and organizational settings of the medical institutions were among the recommendations.

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

Over the past three to five decades, there has been a growing belief in all sectors of employment and in government that the experience of stress at work has undesirable consequences for the health and safety of individuals and for the health of their organizations. This belief has been reflected both in public and media interest and in increasing concern voiced by the trades unions, and professional and scientific bodies(Cox, Tom, Griffiths, & Rial-Gonzalez, 2000).

Stress is subjective experience and a complex phenomenon. Typically, it describes as a negative concept that can have an impact on one's mental and physical wellbeing. However, defining stress is a very complex matter and continuous debate among experts because Stress is a part of life and is created by constantly changing situations that a person must face (Lars, Kunzmann & Schmidt, n.d.). Abundant literature shows that, scholars have different arguments and understandings on the concept stress. For some, the term stress referred to an individual's response to the adverse impact of their environment, while others related it to stimuli that cause adaptive responses of the organism. Bowling and Beehr (2006) describe stress as the relationship between a person and its environment. A well-known approach was developed by Lazarus (1978). The approach defined stress as a particular relationship between a person and the environment that is appraised by the person as taxing or exceeding his or her resource and endangering his or her well-being beyond the details of this debate. A general consensus can be reached about a definition of stress, which is centered on the idea of a perceived imbalance in the interface between an individual, the environment and other individuals (Murray, Yanagi, Ensign, Clark & Darst, 2010).

The terms occupational stress, job stress, organizational stress, and work-related stress are used interchangeably as forwarded by Vokic and Bogdanic (2007) because occupations, jobs, organization and work are often indistinguishable concepts. Occupational stress is becoming one of the most severe health problems in the modern world as it happens in any occupation and is even more present than decades ago (Lu Cooper, Kao & Zhou 2003). Job stress can reduce the enjoyment in life, cause hypertension, cardiac problems, reduce immunity, contribute to

substance abuse and reduce the overall status of mental and physical wellbeing (Bhatia, Kishore , Anand & Iloha, 2010).

Job stress among healthcare staff is becoming a common phenomenon in most health services. Medical staff focuses on activities related to diagnosis and treatment of human responses to health and illness phenomena. However, in these caring occupations there are numerous sources of built-in stress that become inherently hazards for medical staffs. As suggested by Brien(2012) experience of stress such as emanate from various sources such as; staff shortages, high level of responsibility, dealing with the death and the dying, dealing with patient's relatives, coping with the unpredictable, making critical judgment about interventions and treatment, and balancing between work and family commitments. Thus, stress often exerts negative effect on the physical health and psychological well being of the medical staff. It has been observed that social, physical and emotional factors are greatly perceived as the causes of stress among these medical staffs. Nazeer and Sultana(2014) indicated those medical professionals are not immune from stress and suicidal tendencies. Stresses, if not dealt with effectively and timely, it is followed by loneliness, nervousness and sleeplessness(Nazeer & Sultana, 2014).

According to the Health and Safety Executive organization (2010), stress has consistently been the second most commonly reported type of work-related illness for instance, in the UK, and is responsible for the loss of 55% of total working days. Besides, employees in health and social work have the highest rate of illnesses across all occupations and industries. The Employees are not aware or deliberately ignore their early stress level until they develop depression, anxiety or burnout. Moreover, in industrialized countries, people are increasingly familiar with what work-related stress is and how to manage it, although the problem persists and even seems to be increasing in the European Union. However, in some developing countries, people may lack knowledge on this subject, and are not aware of the importance of dealing with work-related stress. Job stress negatively affects the health of Pakistani nurses, leads to low performance at work, low quality of nursing care, impacts profession longevity, and causes distress (Khalid & Asmawi , 2010).

Occupational stress has a significant impact on physical and mental health of Nigerian nurses (Mojoyinola, 2008). Nabirye, Brown, Pryor and Maples (2011) indicated that job satisfaction was associated negatively with occupational stress among hospital nurses in Uganda. In South Africa, more than 16% of health staff (most of them nurses) working with HIV patients were treated for stress-related illness and most of these had to take sick leave (Mojoyinola, 2008). Almost all people at some time in their lives experience stress that relates to their occupation. Jobs that involve a responsibility for people's lives can be more stressful. Medical personnel have heavy workloads and must deal with life or death situations frequently. Making a mistake can have dire consequences. In an intensive care unit of a hospital, emergency situations are common; decisions must be made instantly and carried out immediately and accurately (Stuart & Timothy, 2004). Similarly, researches conducted in Ethiopia indicate that the job of medical professionals is stressful. For instance, a study done by Selamawit (2012), to assess prevalence and associated factors of work related stress among nurses working in public hospitals of Addis Ababa, concluded that the prevalence of work related stress was high and about one in four nurses were stressed in their work places.

1.2. Statement of the problem

The prevalence of stress is most commonly reported type of work-related infirmity and negative impact on the physical and psychological well being of individual which resulting from person and environment relationship (Mark & Smith, 2011). Several psychological researches indicate that worldwide changes and development shifts in the nature of organizations may result in increasingly stressful working environments and manifested in many forms. These include a lack of control at work, shorter holidays, longer hours, insufficient rewards, job insecurity, poor promotion prospects, and increased time pressure, lack of support, poor feedback, isolation, harassment, role conflict, and work-life balance issues (Mark & Smith, 2011). Likewise, with the increase in workloads in the past decades, the number of employees experiencing psychological problems related to occupational stress has increased. Subsequently; these situations make the problems as one of the research areas around the world.

There are some research conducted in the areas of stress in Ethiopia, for instance, work related stress among Anesthetists by Genet(2014), work related stress and coping strategies by Abiy(2014) and negative consequences of using psychoactive drugs on psychological, social and health effects by Betelhem (2014). Most the previous studies gave insight on consideration and emphasizes on the personal or internal to the individual towards stress and they lack comprehensiveness and environmental or external dimension to the individual. Similarly, Glanz, Rimer and Lewis (2002) argued that stressful experiences are construed as person-environment transaction. These transactions depend on the impact of the external stressor and demands made by the internal or external environment that upset balance, thus affecting physical and psychological well-being and requiring action to restore balance. However, the previous studies conducted in Ethiopia gave less consideration to the influence of the external dimension of stress to individuals.

Moreover, sources of job stress and levels of job satisfaction are extensively investigated abroad, but no extensive studies have been conducted in Ethiopia to identify psychological challenges of medical staff in general and that of medical staffs' in particular. Though the Medical staff-per-bed ratio in Ethiopia is 2:3 while the world average is 1:2 medical staffs per bed, which has been based on data from the World Health Organization (WHO), medical staffs still feel the fatigue from the intensive care giving nature and related burdens of their careers. Active medical staffs are experiencing a lot of stressful challenges throughout the country.

Medical staff stress has not yet been conducted in Ethiopia, particularly in the medical staff of Arsi zone. Numbers of studies have been conducted in different areas of the world. But a huge gap exists in the third world countries like Ethiopia. Although the effect is a global phenomenon and same effects are existent in Ethiopia. Besides that, no prior value adding researches have been conducted on stress factors, consequence and coping mechanism in the medical staff particularly in Arsi zone. Hence, it is quite difficult to predict and determine stress factors and coping mechanism in the profession of health care. This study, therefore, tried to address gaps related to factors that contribute to stress and related issues of the medical staffs of Arsi zone. This research addressed the following basic research questions:-

1. What factors contribute to stress among medical staff members in Arsi zone of, Ethiopia?
2. What are the consequences of stress among medical staff members?
3. How do medical staffs manage stress?

1.3. Objectives

1.3.1. General objective

The general objective of this study is to factors contributing to stress, consequences and copping strategy among medical staff members in Arsi zone, Oromia national regional state, Ethiopia.

1.3.2. Specific objective

- To identify factors contributing to stress among medical staff members in Arsi zone of, Ethiopia.
- To assess the consequences of stress among medical staff members.
- To investigate major stress coping strategies utilized by the medical staff Members at the study areas

1.4. Significance of the Study

The study aimed at identifying stress factor, consequences and copping strategy among medical staff members in West and East Arsi zone, Ethiopia. Thus, knowledge obtained from the investigation would be useful information in the formulation of program to address the stress problem among medical staff in the zone under study and other similar areas in Ethiopia. Moreover, the study highlights the gaps in the policy/institutional arena so that it provides important data inputs for policy makers, especially at the ministry of health and other stakeholders. Last but not least, the study could contribute to the basic data that serve as a spring board to other researchers who want to conduct a detailed study on stressful conditions of medical staff.

1.5. Operation definition of terms

Stress-Stress can be defined operationally as the means by which the body's coping mechanism adapts to external stimuli and changes in the surrounding environment.

Copping strategies-refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events.

Medical staff-physicians and dentists who are approved and given privileges to provide health care to patients in a hospital or other health care facility

Consequence-`a result or effect of an action or condition

Cause - something that produces an effect, result or condition

1.6. Limitation

Some of the challenges which the researcher may face are:

- ✓ Few respondents did not return a questionnaire in due time and it was a difficult task to wait until all return as intended.
- ✓ Unwillingness of some medical staff member to give appropriate information and less support.

1.7. Delimitation

This study was delimited to selected hospitals of Arsi zone; national Regional State of Oromia, Ethiopia. In fact, stress is a broad and complex incident within the society to examine all in all. Thus, researcher is forced to delimit the scope of the study on three hospitals of Arsi zone. The three hospitals was selected from hospitals found in the zone due to the location of the hospital suitability to get available information related to the stress factors, consequences and copping strategies in the selected hospital of Arsi zone. In addition, the selected hospitals are more close to the people having different background and different culture that are supported by their kinship.

CHAPTER TWO: LITERATURE REVIEW

2.1. Meaning of Stress

According to Blaug, Kenyon and Lekhi (2007), job stress arises when there is imbalance between the job demands and abilities and skills of an employee to deal with these job demands. It has been indicated in several literatures that there are essentially three different, but overlapping approaches to the definition and study of stress (Cox, Tom, Griffiths & Rial-Gonzalez, 2000). The first approach conceptualizes occupational stress as an aversive or noxious characteristic of the work environment and treats it as an independent variable in which the environmental cause of ill health. This has been termed the 'engineering approach'. The second approach, on the other hand, defines stress in terms of the common physiological effects of a wide range of aversive or noxious stimuli. It treats stress as a dependent variable as a particular physiological response to a threatening or damaging environment. This has been termed the 'physiological approach'. The third approach conceptualizes work stress in terms of the dynamic interaction between the person and their work environment. This final approach has been termed the 'psychological approach (Cox, Tom, Griffiths, & Rial-Gonzalez, 2000).

2.2. Concept of stress

Arnold and Feldman cited in Adetayo (2000) define stress as the reactions of individuals to new or threatening factors in their work environment. Since our work environments often contain new situations, this definition suggests that stress is inevitable. This definition also highlights the fact that reactions to stressful situations are individualized and can result in emotional, perceptual, behavioural and physiological changes.Stress is defined either as a reaction or as a stimulus. As a reaction, the meaning of stress is consortium with specific changes that human biological system is experiencing .As stimulus; the definition of stress is related to environmental events that cause those changes. The stressful events can be acute, chronic, remitting and continuous chronic form.

Selye cited in Brenda (2010) propounds that stress is not necessarily something bad rather it all depends on how someone takes it. Stress of exciting, creative, and successful work experience is beneficial; while that of failure, humiliation or infection is disadvantageous. It widely believed that biochemical effects of stress would be experienced irrespective of whether the situation was positive or negative. In positive situations, harmful biochemical and long term effects of stress

have rarely been observed. Selye also divides stress responses as short-term which is the basic survival instinct response characterized by run faster, fight harder, increase heart rate, blood pressure and sweating, with the reduction in ability to work with others and to make good decisions. The other division is the long term (general adaptation syndrome) which results from extended exposure to stressors. The phases stages identified are the alarm phase which is explained by the immediate reaction to the stressor, resistance phase as time when someone adapt and coped with the stressor and exhaustion phase when the resistance to stressors declines, like burnout.

2.3. Factors of stress

Employees experience and feel stressed due to a set of various reasons and therefore the reactions of stress at the workplace are not a separate aspect. Fairbrother and Warn (2003) describe that the stress level is changing rapidly among the employees due to a set of various factors such as work overload, over crowdedness at the workplace, generating of loud noises by machines and arousal of conflicts among the employees and the employer due to poor or inadequate decision. In general causes of stress related to workplace can be categorized in environmental, organizational and personal factors.

2.3.1. Environmental factors

Environmental stressors includes those stressors such as physical, chemical or biological agents which might influence the worker's comfort and performance in his or her work environment and might contribute to a stress response. These factors can cause stress on their own but often act to exacerbate a person's response to another stressor. Many managers and supervisors labour under the mistaken impression that the level of employee performance on the job is proportional to the size of the employee's pay packet. Although this may be true in some of the cases, numerous employee surveys have shown time and again that this assertion is untrue (Chandrasekar, 2011).

In fact, salary increases and bonuses for performance, in many instances, have a very limited short-term effect. The extra money soon comes to be regarded not as an incentive but as an "entitlement". It is the quality of the employee's workplace environment that most impacts on their level of motivation by economic uncertainty, political uncertainty, technological change,

noise, temperature and humidity, lighting, vibration, air quality, unguarded plant, equipment and subsequent performance. How well they engage with the organization, especially with their immediate environment, influences to a great extent their error rate, level of innovation and collaboration with other employees, absenteeism and ultimately, how long they stay in the job. Many studies have revealed that most employees leave their organization because of the relationship with their immediate supervisor or manager (Vandana, 2016).

2.3.2. Organizational factors

According to organizational factors include those factors like discrimination in pay/salary structure, strict rules and regulations, ineffective communication, peer pressure, goals conflicts/goals ambiguity, more of centralized and formal organization structure, less promotional opportunities, lack of employees participation in decision-making, excessive control over the employees by the manager's, monotonous nature of job, unsafe and unhealthy working conditions, lack of confidentiality, crowding, and unable to cope up with today's modern and technological advancement. Issues such as role uncertainty; that is not being able to know exactly what employees are supposed to do and what others expect from them and also having too much work at hand with little time to accomplish it can cause stress at the work place.

Further organizational factors of stress are poor working conditions where the employee is often too distracted, where there is noise, chilly or too warm temperatures and where the workplace is often filled with people running here and there. Lack of control, suddenness, and ambiguity; especially role ambiguity is the foremost reason of stress. On the other hand, inflation, technological change, social responsibilities and rapid social changes are also other extra-organizational factors causing stress (Parker cited in Selamawit, 2013).

2.3.3. Personal factors

Individual factors are various expectations which the family members peer, superior and subordinates have from the employee. Failure to understand such expectations or to convey such expectations lead to role ambiguity/role conflict which in turn causes employee stress. Other individual factors causing stress among employees are inherent personality traits such as being impatient, aggressive, rigid, feeling time pressure, etc. Similarly, the family issues, personal financial problems, sudden career changes all lead to stress (Naik, 2015).

Stress can arise because of transitions made in our personal lives. Al-Omar (2003) said that personal issues that contribute to stress are those such as domestic problems in the house like losing loved ones, family size, financial problems and divorce. These could be categorized as individual causes that lead to stress.

Previous research works revealed that there are many causes of work related-stress. A study conducted on consultants working in the UK, reported that work overload and influenced home-life; poor administration and resources; administrative responsibilities assumed and dealing with patients' pain were perceived as sources of stress. There have been a number of studies into the sources of stress involved in hospice work. Identified a mixture of factors related to organization of care, workplace culture and the intrinsic nature of work caring for dying people.

Individual differences in reactions to stress in workplace do not have the same effect on all individuals. There are a range of personal, social, and environmental moderators within each of us that influence our susceptibility and coping abilities in relation to the stressors we experience. Personality differences, gender differences, age, and supporting system all seem to be important factors in determining how well individuals cope with workplace stress (Wichert, 2002).

2.3.3.1. Personality differences

With respect to individual personality differences, one can view workplace stress as a function of the relationship between work characteristics and the attributes of and resources available to the individual worker. A well known perspective on personality variables and their relations to stress are the distinctions between "Types A" and "Type B" personality types which were derived by two cardiologists looking to explain the role of psychological factors in cardiovascular disease. Type A behaviors include such things as ambition, aggressive competitiveness, and an eagerness to get things done on time, as well as self absorption, and a tendency to be cynical and hostile. On the other hand, the Type B personality includes behaviors that are much more relaxed and less competitive (Bickford, 2005).

Type A characteristics have a significantly increased risk of experiencing the deleterious effects of stress, specifically with respect to cardiovascular disease. It is argued that individuals exhibiting Type A behaviors are more likely to enter into demanding jobs, more likely to over react to them, and for this reason would be more vulnerable to stress and coronary heart disease in particular (Wainwright & Calnan, 2002).

2.3.3.2. Locus of control

Another personality factor that has been found to affect individual reactions to stressors is the locus of control. People can be differentiated on the basis of their 'generalized expectancy' concerning internal and external control of life events and outcomes. Specifically, some individuals feel that events are caused by factors external to them which they have little or no control over (meaning they have an external locus of control), while others tend to feel that events are caused by internal factors which they have a great deal or entire control over (meaning they have an internal locus of control). There is evidence to suggest that individuals who have an external locus of control tend to respond to perceived stressors with negative emotions and may be more prone to the negative effects of stress when they feel pressured at work (Grimshaw, 1999). Specifically, these individuals have been shown to report more burnout, higher levels of perceived tress, less job satisfaction, greater anger, frustration and hostility, and higher levels of anxiety. The internal locus of control is associated with a number of highly desirable behaviors and attributes, including higher job motivation and better performance, higher job satisfaction and psychological well being. The underlying premise is that individuals who define stress factors as controllable was more likely to try and cope with them using a problem solving approach and will thereby experience fewer ill effects. Externals might not take active steps to resolve their feelings of stress (Grimshaw, 1999).

2.3.3.3. Gender differences

Gender is another factor that is important in determining susceptibility to work place stress. Research indicates that women are more likely than men to experience the negative effects of stress (Addis, 2014). Several factors appear to magnify the effect of workplace stress on women, and include: the predominant role that women still play in the provision of family care. It is well

established that the total workload of women who are employed full time is higher than that of their male counterparts, particularly where they have family responsibilities.

- ✓ Lower levels of control in their jobs, since the great majority of women still tend to occupy less senior jobs than men.
- ✓ The higher proportion of women who work in precarious forms of employment.
- ✓ The proliferation of women in high stress occupations.
- ✓ The prejudice and discrimination suffered by many women who are in more senior positions, such as managerial jobs, both as a result of organizational and corporate policy and from their colleagues at work.

Largely due to these kinds of factors, women are significantly more likely to report burnout, stress related illnesses, or a desire to leave their jobs.

Age can influence the type of workplace stress experienced, but it tends to be specific to certain aspects of the job. For example, in a study conducted by Williams (2002), more workers over the age of 45 felt stress as a result of having to learn computer skills, as compared to workers between the ages of 15 and 24. With respect to stress as a response to risk of injury or accidents, more young men felt this as a significant source of stress than older male workers. Young employees were significantly less likely than older employees to feel that too many hours / too many demands were a source of stress. It was also reported by Wichert (2002) that with respect to job security, older employees tend to experience less stress than their younger counterparts but experience more stress than younger workers when it comes to work intensification.

2.4. Consequences of stress related to work

Sengupta (2007) stated that stress may cause physiological, behavioural or even psychological effects

2.4.1. Physiological consequence

One of the physiological responses is the ‘fight or flight’ response which happens at the automatic nervous level. In other words, people gear the body up so as to respond to the challenges facing by them, either by standing ground or hitting back or by a prompt strategic withdrawal ( ). All these responses are happened automatically, in which the body will recognize the need for a response and produces it without the need of people to tell the body to do so.

However, the problem associated is that those responses are acted as a short-term and immediate reaction, designed to shut down as soon as the emergency is past. If they do not shut down, there were adverse effects. A main aspect characterized by the author about human body responses to stress namely energy mobilizes energy support systems, concentration aids and defensive reactions

2.4.2. Psychological Consequences

The optimum level of stress is healthy to us. However, when the stress level is too high, it drains our psychological energy, impairs our performance and leaves people a feeling of useless and undervalued, with diminishing purpose and hopeless, unattainable objectives

The General Adaptation Syndrome (GAS) model involves three stages: alarm reaction stage, the stage of resistance and the stage of exhaustion. There were some adverse impacts when an individual reaches the stage of exhaustion. Firstly, there was increase in physical and psychological tensions, in which the ability to relax muscle tone, to feel good, to switch off worries and anxiety reduces. Secondly, there are changes in personality traits. For example, if a person is a neat and tidy person originally, he or she may become messy and untidy. Apart from the change of personality, the existing personality problem will also increase. For example, there was worsening of existing anxiety, over-sensitivity, defensiveness and hostility (Oladinrin, 2014**).**

Apart from all the impacts mentioned above, there will also be depression and the feeling of helplessness arises When a person is having too much stress, he or she will have a lower spirit or a sense of powerlessness to influence events or ones feelings. Besides, their self-esteem will fall sharply, in which a feeling of incompetence and worthlessness develop. This problem is very serious if this happens in a project manager. As a project manager needs to have lots of decision making, he or she somehow should have some confidence in himself or herself, in addition with his or her professional knowledge, so as to make a wise decision.

However, if the personality is affected by the stress level, this will incredibly affect the decision-making process, which may cause huge problem to the organization functioning. As mentioned by Albrecht cited in Oladinrin (2014**),** there was a severe risk to both health and organizational

success when there is work-related stress as they are playing a central role in the performance of an organization.

2.4.3. Behavioural Consequences

There are also other types of consequences apart from those suggested above, which can be categorized as general behavioural consequences. Firstly, long working hours have been a very common source of stress and hence there was less time spent with their family. As a result, working long hours and having insufficient time with their immediate family may limit the amount of social support that they receive (Haynes & Love 2003). The lack of social support can be a very serious problem, which may trigger the threats of committing suicide.

Chowhiu (2009) stated that too much stress will also lead to the increase of cynicism about clients and colleagues, in which there was a tendency develops to lay the blame upon others. Apart from that, negative health-related behaviours such as smoking more, drinking more alcohol as usual and skipping breakfast are associated with high levels of occupational stress. All of these behaviours will affect one's health and ultimately lead to work impairment or other adverse effects.

Fontana cited in Chowhiu (2009) also suggests that too much stress will lead to poor job or manufactured excuses or lateness, discontent or low morale. As a result, there was a high labour turnover and thus the loss of employees. Stress can be costly as key people may have to leave due to ill-health, and indecision may cause the loss of important contract.

2.5. Copping strategies of stress

Stress can be destructive if not well managed. In addition to its effect on the health of the individual, it also has a direct bearing on the individual's performance at work and productivity (Siakwa, 2014).

Coping of stress is described as the successful management of problems and stressful situations. The coping strategy (coping mechanism) is defined as an innate or acquired response to a changing environment or to a specific problem or a situation (Al-Omar,2003).

Folkman and Lazarus (1991) stated that coping is the perceived and behavioral effort in order to adjust in specific external or internal requirements which exceed the individuals' management resources. Gold and Thornton (2001) described that there are two types of coping strategies. Coping that is focusing in the problem (problem-focused coping): indicating to the efforts for improving some situation by creating changes or taking measures and emotional centered coping (emotion - focused coping): includes thoughts and actions that are relieving the feeling. This coping strategy does not improve the situation, but by using it the person feels better. Coping strategies can also distinguish into long term and short term (Haber, 1987). Haber (1987) said that long-term coping strategies can be realistic and constructive while the short-term coping strategies may temporarily reduce stress to a tolerable level, but they are inadequate ways of reality management and furthermore they may have devastating effect on the individual. Stress coping may be adaptive or maladaptive. Adaptive coping is what helps the individual to deal effectively with stressful events and to minimize the risk deriving from those while maladaptive coping does not have any positive results in stress management (Keable,1997).

The effectiveness of coping strategies that an individual may use depends on various factors such as the number, duration and intensity of stress sources, previous experiences of the individual, available support systems and the personal abilities .If the duration of those stressors is extended and goes beyond the coping dynamic of the individual, the individual could experience exhaustion and develops a susceptibility to health conditions. Extended stress can also lead to mental disease. As the coping and defense mechanisms strategies become ineffective, the individual may have difficulties in his interpersonal relationships, problems at work and significant reduction of abilities for addressing essential needs (Skinner, 1987).

There are two different approaches to coping with stress. The first approach is to locate the origins of work stress in the structure and organization of the modern workplace and to see the solution in terms of job redesign. The second approach is to locate work stress in the responses of the individual and see the solution in terms of therapeutic intervention (Wainwright & Calnan, 2002). The most effective method for workers to manage stress seems to lay in solutions that combine stress management at both the environmental, organizational and personal level. Of the

two, organizational strategies are more effective in reducing long term stress and risk of illness; however, it is just as important that individuals have personal coping strategies at their disposal for when stress inevitably occurs (Cahill, Landsbergis, & Schnall, 1995).

2.5.1. Individual Level

It is extremely important that individuals are taught to recognize when they are feeling stressed and to develop personal coping strategies to utilize when they are feeling over whelmed by stress. The Canadian Mental Health Association (n.d.) lists a number of methods for individuals to use in coping with stress. Bickford(2005) also listed physical exercises, encourage a healthy lifestyle, take a regular sleep, have plenty of water, healthy eating habits, listening music and meditation, emotional intelligence at workplace and optimistic approach about their work were as methods for individuals to use in coping with stress.

2.5.1.1. Relaxation techniques

Learning relaxation techniques can be one of the most effective ways of dealing with stress (Gold and Thornton ,2001). While the stress response speeds up the body's reactions and tenses the muscles, relaxation will do the opposite, by deepening breathing, slowing the pulse and heart rate, and relaxing the muscles. Deep breathing is a tool we have at our disposal all the time. No matter where you are, it is easy to take a few minutes to practice deep breathing, exhaling slowly until your abdomen is flat, and then filling up your lungs, diaphragm and abdomen with air as you inhale. Doing this several times a day will help to calm your body and your mind. Progressive relaxation refers to the process of training your body to relax completely by tensing and releasing each set of muscles in turn. Books or cassette tapes are available that can help to guide you through the process. Massage therapy and hot baths are other methods of relaxing tense muscles that will help release stress (Gold and Thornton ,2001).

2.5.1.2. Ways to focus your mind.

Individuals who worry excessively and beat themselves up in their own minds can benefit from finding ways to focus their minds and let go of troublesome or painful thoughts (Hagos, 1998). The ancient practice of meditation is a proven way to work with the chaos of our thoughts towards a sense of peace. There are many books on meditation and many different techniques, as well as a number of groups that can provide an introduction to the practice. Spending regular time on a hobby will help to restore energy and sense of wellbeing. Absorbing yourself in

something you really enjoy is a great way to give yourself a break from the hassles and stresses of everyday life. We have already spoken to the benefits of supporting system in the work environment. However, having supportive friends in general can help when we are experiencing stress. We all need someone we can talk to get our worries off our chest, someone who will listen without judgment and appreciate you for who you are. One of the very best ways to relax your mind is by laughing! Good, hearty laughter causes the release of endorphins, which are the body's natural "feel good" chemical. It is a good idea to collect things that make you laugh cartoons, books, movies and look at them when you feel overstressed. You'll be amazed how smiles and laughter can lighten your mood)).

2.5.1.3. Daily habits

Individuals who feel tired and lacking in energy may be experiencing stress due to unhealthy daily habits that are interfering with the body's ability to maintain a sense of well being (Steven & Mary, 2008). An individual's diet, amount of sleep, caffeine consumption, and level of activity are all important factors in one's general health. Maintaining your health by practicing healthy habits can be important in fighting off the negative effects of stress. It is important to maintain a balanced diet to ensure that we are keeping our bodies healthy. We are what we eat, and we need a balanced intake of healthy food. Too much fatty "comfort" food adds weight and depletes energy. It is important to get enough fresh fruit and vegetables, and drink plenty of water. Our bodies need adequate sleep to restore our energy. Many people these days are sleep deprived without realizing it. Artificial light and late night television keep many of us up and awake at hours when our ancestors used to sleep. Try going to bed early after a hot bath, or listen to a relaxation tape to help you fall asleep. You'll feel much better in the morning. It is advisable to cut caffeine consumption down. Caffeine is a stimulant that simulates the stress response and can make us edgy and "hyper". Keeping your consumption down to three cups of coffee daily or cutting it out completely is recommended.

Exercise is one of the best ways to release tension and relax our minds and bodies (Holroyd & Lazarus, 1982). It's great if you enjoy sports, but it doesn't have to be that formal. Swimming and biking are excellent. Walking the dog, working in the garden, and vacuuming the house are all

forms of exercise. Or join a dance or yoga class and get the benefit of meeting people along with the exercise.

Grimshaw(1999) points out that while individual level stress management interventions may be of value in helping workers cope with unavoidable pressures, they deal with only part of the problem, and need to act as a supplement to organizational change programs that deal with the root causes of stress in unhealthy work environments.

2.6. Organization level stress coping mechanisms

Organizations may have different reasons for wanting to implement stress management initiatives. One reason may be the need to reduce the costs to the organization of stress related illness, absenteeism and staff turnover (Nazeer & Sultana,2014). It may be a humanitarian desire to improve working conditions. There may be regulations in place regarding the listing and assessing of workplace hazards, including hazards to mental health such as psychological stress, and to provide a safe working environment. An organization might wish to be seen as caring and as looking after their employees in order to raise morale or improve the company image including promote job rotation and job enrichment ,safe working environment, have effective hiring and orientation procedure, encourage decentralization, encourage participation in decision-making, meaningful ,timely feedback and greater responsibility. A final reason for wanting to make these changes may simply be to follow current trends where other s organizations are introducing stress management interventions. Grimshaw (1999) pointed out that, whatever the reason may be, the issue of workplace stress can no longer be ignored, and it is necessary for changes to be made where unhealthy work environments exist.

2.7. Environmental level of stress coping mechanisms

Harish and Rachita (2013) pointed out that social contact support, environmental features, a person's ability to know the potential surrounding environment can be used as a resource and social support.

Producing adequate environment-This might have adverse effects on the morale of the entire work force. Therefore organizations should establish working conditions that do not affect the

work force negatively by providing noise free environments, adequate lighting systems, and adequate temperatures among other things.

Problem-Focused Coping - Problem-focused coping means the involvement of and individual's effort to cope with the sources of stress through the modification of their own behaviour or environmental conditions stated that individual under stress tries to change their behaviour or other external factors to deal with the sources which primarily seeks to modify the stressful person-situation relationship.

Job future- Employees should be clearly informed about opportunities to improve their job skills and career opportunities, as well as about the organization and economic developments that may alter their employment situation

Domains of social support- Opportunities should be provided for meaningful interpersonal interaction and communication, both for emotional support and support in fulfilling job tasks and other assigned responsibilities (Steven & Mary,2008).

Reports on International Labor Organization (2001) also indicate that there may be differences in the coping mechanisms of men and women dealing with stress. It has been found that in general, women tend to use more social emotional strategies to cope with stress, whereas men are more likely to use behavioral/mental or drug/alcohol disengagement. Men tend to cope by way of problem Focused strategies while women characteristically use more emotional focused strategies to manage their stress. There is also evidence to suggest that women may have been socialized in a way that predisposes them to ineffective coping, for example, women get sick as a way of coping with stress more often than men do. Finally, when it comes to how men and women react to stress over the long term, it has been found that men tend to show physical deterioration as a response to stressful situations, whereas women generally exhibit psychological symptoms (Wichert, 2002)

2.8. Symptoms of stress

There are certain signs and symptoms that reflect the existence of stress. Relevant literature classifies stress symptoms into physiological, emotional and behavioral (Addis, 2014). Physiological symptoms include the increase in blood pressure, breathing rate, heart beating rate, sweating a pounding heart ,elevated blood pressure ,sweaty palms ,tightness of chest ,aching neck, jaw and back muscles, headache ,chest pains ,abdominal cramps , nausea , trembling ,sleep disturbance , tiredness ,susceptibility to minor illness ,itching ,easily startled and forgetfulness. Yet, if the stress is unbroken certain unpleasant and dangerous results such as heart attacks, increased cholesterol level, and ulcers may appear. The most common emotional symptoms are anxiety, tension, and depression, lack of interest, hopelessness, mental exhaustion, low confidence irritable ,angry ,depressed, jealous ,restless ,anxious ,unreal or hyper alert and unnecessarily guilty. If stress level increases less job satisfaction is expected. Among the most common work-related behavioral symptoms include decreased performance, absenteeism, difficulties in concentration and communication, more turnover rates, higher alcohol and drug abuse, unexpected behavior, and higher rate of smoking become withdrawn and not want to socialize increase, nicotine or drugs intake, under eat or over eat ,become accident prone and careless ,become impatient, aggressive or compulsive pacing, fidgeting, swearing, blaming, throwing and hitting work longer hours not take breaks, take work home, procrastinate with important projects, take the 'headless chicken' approach when under pressure, and manage time poorly and No longer have time for leisure activities(Mcinnes ,Grayson & TonyBannister, n.d.).

Supporting systems of stress -Supporting system refers to a network of connections with other human beings that can provide assistance, support, and help for a person. A lack of supporting system can lead employees to feel isolated and alone at work, exacerbating the effects of workplace. In addition; supporting system can provide resources for people to deal more effectively with stressors, ultimately reducing job stress (Neveu, 2007).

Furthermore, supporting system is a valuable resource because it provides psychological support, assistance, feedback, and motivation for employees. Supporting system can be creating a positive feeling for employees but its benefits extend to both employees and employers. Supporting system systems can allow innovation to occur, which can result in quicker solutions to workplace

issues, allowing work to become more productive and enjoyable. Conversely, a lack of supporting system can be seen as a form of resource depletion for prison workers, detracting from positive outcomes from work. Supporting system can be an excellent way to boost self-confidence and self-esteem (Lambert & Paoline, 2010).

2.9. Types of stress

Clarkin (n.d.) indicates that the body does not distinguish between negative and positive stress: both excitement and anxiety strain the body's resources and depress the immune system. Stress varies in intensity and duration. September and Lockwood (2017) describes three different types of stress as follow.

2.9.1. Acute

This is the most common type of stress and is short term, such as hurrying to meet a deadline, and if it occurs infrequently causes little problem. However, if acute stress happens frequently, it can cause psychological and physical distress. Acute stress is the most common form of name. It comes from demands and pressures of the recent past and anticipated demands and pressures of the near future. Acute stress is thrilling and exciting in small doses, but too much is exhausting. A fast run down a challenging ski slope, for example, is exhilarating early in the day. That same ski run late in the day is taxing and wearing. Skiing beyond your limits can lead to falls and broken bones. By the same token, overdoing on short-term stress can lead to psychological distress, tension headaches, upset stomach and other symptoms.

Fortunately, acute stress symptoms are recognized by most people. It's a laundry list of what has gone awry in their lives: the auto accident that crumpled the car fender, the loss of an important contract, a deadline they're rushing to meet and their child's occasional problems at school and so on. Because it is short term, acute stress doesn't have enough time to do the extensive damage associated with long-term stress. The most common symptoms are:

- Emotional distress some combination of anger or irritability, anxiety and depression, the three stress emotions.
- Muscular problems including tension headache, back pain, jaw pain and the muscular tensions that lead to pulled muscles and tendon and ligament problems.

- Stomach, gut and bowel problems such as heartburn, acid stomach, flatulence, diarrhea, constipation and irritable bowel syndrome.
- Transient over arousal leads to elevation in blood pressure, rapid heartbeat, sweaty palms, heart palpitations, dizziness, migraine headaches, cold hands or feet, shortness of breath and chest pain. Acute stress can crop up in anyone's life, and it is highly treatable and manageable.

2.9.2. Episodic acute stress

This is repetitive short-term acute stress, such as the person who always runs late for work and appointments or never completes assignments or tasks on time. These people are in a constant state of arousal and anxiety. There are those, however, who suffer acute stress frequently, whose lives are so disordered that they are studies in chaos and crisis. They're always in a rush, but always late. If something can go wrong, it does. They take on too much, have too many irons in the fire, and can't organize the slew of self-inflicted demands and pressures clamoring for their attention. They seem perpetually in the clutches of acute stress.

It is common for people with acute stress reactions to be over aroused, short-tempered, irritable, anxious and tense. Often, they describe themselves as having a lot of nervous energy. Always in a hurry, they tend to be abrupt, and sometimes their irritability comes across as hostility. Interpersonal relationships deteriorate rapidly when others respond with real hostility. The workplace becomes a very stressful place for them.

The symptoms of episodic acute stress are the symptoms of extended over arousal: persistent tension headaches, migraines, hypertension, chest pain and heart disease. Treating episodic acute stress requires intervention on a number of levels, generally requiring professional help, which may take many months.

Often, lifestyle and personality issues are so ingrained and habitual with these individuals that they see nothing wrong with the way they conduct their lives. They blame their woes on other people and external events. Frequently, they see their lifestyle, their patterns of interacting with others, and their ways of perceiving the world as part and parcel of who and what they are.

Sufferers can be fiercely resistant to change. Only the promise of relief from pain and discomfort of their symptoms can keep them in treatment and on track in their recovery program.

2.9.3. Chronic

This type of stress lacks the ups and downs of emotions associated with more acute stress, but it is a constant weight that burdens people and results in anxiety and depression and difficulty coping while acute stress can be thrilling and exciting, chronic stress is not. This is the grinding stress that wears people away day after day, year after year. Chronic stress destroys bodies, minds and lives. It wreaks havoc through long-term attrition. It's the stress of poverty, of dysfunctional families, of being trapped in an unhappy marriage or in a despised job or career. It's the stress that the never-ending "troubles" have brought to the people of Northern Ireland; the tensions of the Middle East have brought to the Arab and Jew, and the endless ethnic rivalries that have been brought to the people of Eastern Europe and the former Soviet Union.

Chronic stress comes when a person never sees a way out of a miserable situation. It's the stress of unrelenting demands and pressures for seemingly interminable periods of time. With no hope, the individual gives up searching for solutions.

Some chronic stresses stem from traumatic, early childhood experiences that become internalized and remain forever painful and present. Some experiences profoundly affect personality. A view of the world, or a belief system, is created that causes unending stress for the individual (e.g., the world is a threatening place, people will find out you are a pretender, and you must be perfect at all times). When personality or deep-seated convictions and beliefs must be reformulated, recovery requires active self-examination, often with professional help. The worst aspect of chronic stress is that people get used to it. They forget it's there. People are immediately aware of acute stress because it is new; they ignore chronic stress because it is old, familiar, and sometimes, almost comfortable.

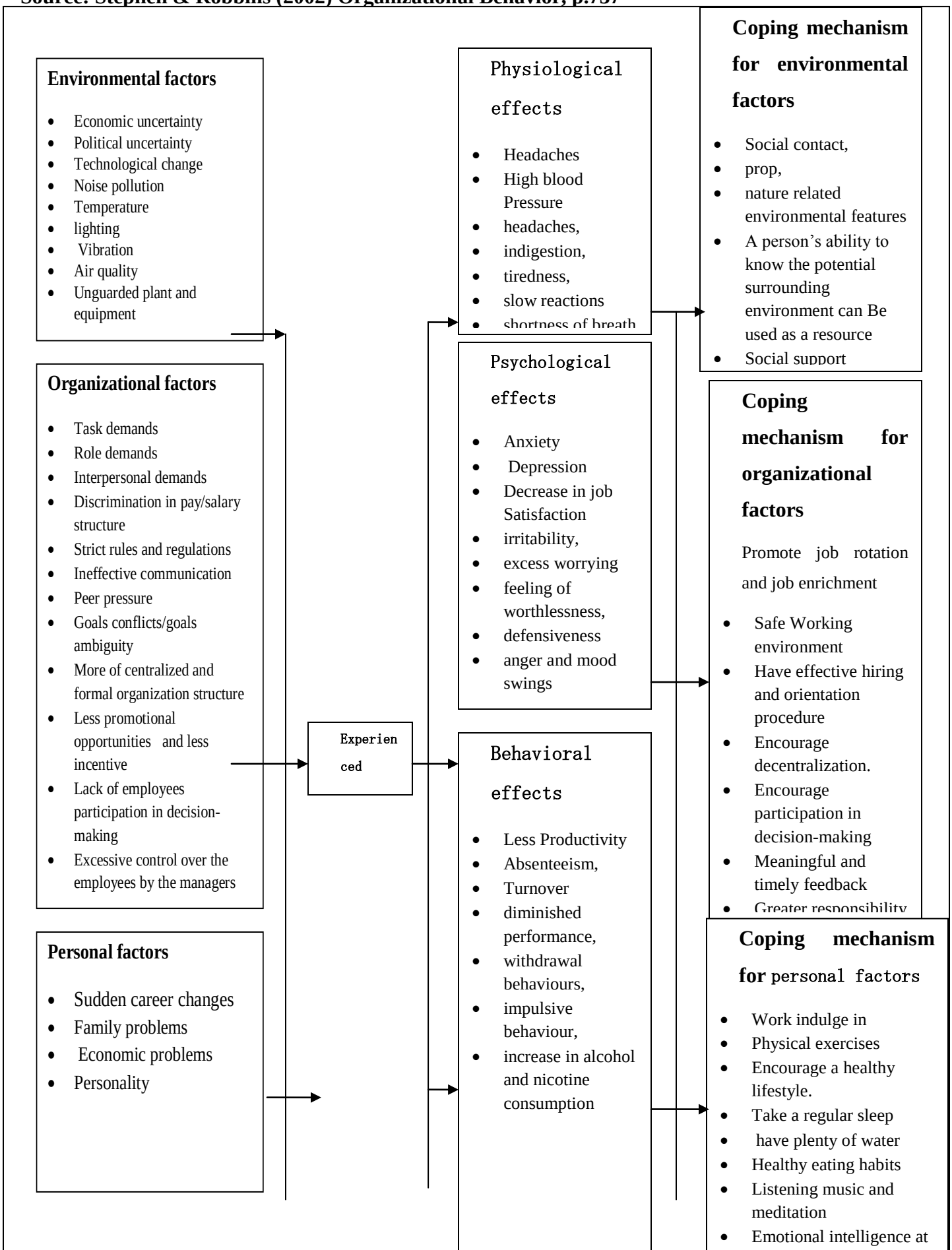
Chronic stress kills through suicide, violence, heart attack, stroke and, perhaps, even cancer. People wear down to a final, fatal breakdown. Because physical and mental resources are depleted through long-term attrition, the symptoms of chronic stress are difficult to treat and may require extended medical as well as behavioral treatment and stress management.

2.10. Conceptual Framework for the Study

The prevalence of stress has been a major problem which challenges many organizational effectiveness and negative impact on individual wellbeing. However, still the concept and definition of stress is ongoing debate within the scholars. Stress is somewhat a difficult concept to define largely because it is such a unique, individual and subjective experience (Kaila, 2005). Thus, scholars provide definition and assumption toward stress, for instance, Lazarus (1966) define stress as physiological, behavioral and cognitive responses to events appraised as threatening or exceeding one's coping responses and option and Selye (1974) describe stress as a non-specific response of the body to any demand,

The existing literature showed that researchers give emphasizes on the factor that contributed to stress from different point view as the severity of the case increase. Despite the fact that, research gave high concern for the research in the area of stress, the complex nature of the condition and the changing of global environmental make stress the major problem in the world (Sveinsdottir, Biering & Ramel ,2006). Similarly, some research gave consideration in the area of occupational related stress in Ethiopia (for instance Betelhem, Abiy & Genet, 2014). However, research gave little emphasis on the sources, consequence and coping mechanism in medical staff in Ethiopia. To deal with cause, consequence and coping of stress in medical staff, psychological theories could give insight. Accordingly, transactional model of Lazarus cited in Stephen and Robbins (2002) was employed to explain the cause, consequence and coping mechanism of stress in medical staff, Ethiopia.

Source: Stephen & Robbins (2002) Organizational Behavior, p.737



CHAPTER THREE: RESEARCH METHODS

In this chapter design, study area, target population, sample and sampling technique, instrument of data collection, procedure of data collection and methods of data analysis process and ethical consideration are outlined.

3.1. Design

The researcher employed cross-sectional study design in order to provide a clear understanding about stress factors, consequences and coping mechanisms of Arsi zone in selected hospital. This study has made use of quantitative research approach.

3.2. Study area

This study was conducted in West and East Arsi zone. Arsi is one of the zones found in Oromia National Regional State of Ethiopia Arsi (or Arssi). Arsi is also the name of a former province. Both the Zone and the former province are named after a subgroup of the Oromo. Arsi is bordered on the south by Bale, on the southwest by West Arsi Zone, on the northwest by East Shewa, on the north by Afar Region and on the east by West Hararghe. The highest point in Arsi is Mount Chilalo; other notable mountains in this zone include Mount Kaka and Mount Gugu. The administrative center of this zone is Asella; other towns in this zone include Abomsa, Assasa, Bokoji, Sagure, Kersa, Dhera, Etaya, Arsi Robe, Huruta etc. Some woredas at the southern part of the zone were separated from Arsi zone to create West Arsi Zone. There are around five public Hospitals in Arsi zone from those the specific area of the study was selected three Hospitals based on the easiness of accessibility of the Hospitals to the researcher's residential location considering the limited resources allocated for the research and availability of sufficient staff members to represent a sampling frame in each public hospital (Assela teaching hospital, Melka odda and Kuyera referral hospital).

3.3. Target Population

The target populations for this study were medical staff members offering medical service at Assela teaching hospital, Melka odda and Kuyera referral hospital of Arsi zone where their daily work is stressful. These include; doctors, anesthesiologists and nurses. These Medical staff members as indicated in the first chapter of this paper were vulnerable to different on job stress.

3.4. Sample size and Sampling techniques

The sample size was determined by the formula developed by Yamane (1967). His sample determination formula was found to suitable due to the fact that it's the simplified one in the case of finite population. The formula considers 95% of confidence, and 5% margin of error. The formula is:

$n = N / [1 + N (e)^2] \rightarrow n = 602 / [1 + 602 (0.05)^2] = 240$

Where n is the sample size, N is the population size, and e is the level of precision

According to Corbetta (2003), simple random sampling technique appears appropriate when the lists of the units studied are accessible. In simple random sampling technique, each member of the population under study has an equal chance of being selected from a list of the population. Such qualities marked simple random sampling technique as the most appropriate techniques to be used.

3.5. Instruments of data collection

Quantitative types of data were collected by using appropriate tools which were developed and pre-tested on the selected medical centers and study population. These data were collected using questionnaire to get information from individual respondents. Before the main field work, the study instrument was presented to the thesis advisors for their comments and pilot-tested to check for validity and reliability. The questionnaire was consisted of four parts. The first part deals with socio demographic items. The second part consisted of 23 items on factors of stress. The third part consisted of 24 items on consequence of stress. The last one is coping mechanisms of medical. Respondents rated their level of stress on five point Likert scale (1=strongly disagree, 2 =somewhat agree, 3= agree, 4= strongly disagree, 5= strongly agree) while the consequences of stress were rated as four point scale (1=never, 2 =occasionally, 3= frequently 4= very frequently) .

3.6 Pilot testing

Prior to the field survey for collecting data, a pilot test of instruments was conducted for one day in each of the three sampled hospitals in order check the reliability of the instruments. Six non-

sampled medical staff members composed of different professions vis-à-vis Medical Doctor, Nurse, and Anthologists as well as the two sexes (Male and Female) were contacted for the pre-testing from each hospital. The researcher calculated a Cronbanch alpha to measure reliability of two sets of questions (on causes and consequences of stress). Such a statistical tool is preferred by most psychoanalysts and used frequently used to objectively measure the reliability of research instruments (Tavakol & Dennick, 2011). According to Tavakol & Dennick, (2011), an alpha value ranging from 0.7 to 0.9 is acceptable.

Accordingly, the two sets of questions prepared using Likert Scale level of agreement on causes of stress factors (each item adding up to 15 points), and consequences (each item adding up to 6 points), were tested on the 18 respondents. Fortunately, the Chronbach alpha reliability estimate of stress factors and consequences were 0.84. However, a minor modification of questions on stress management strategies were made after the pre-testing was conducted. Some questions such as, for instance, physical relaxation and going to gym, were found to highly co-vary, and hence the researcher merged the questions together.

3.7. Procedure of data collection

The data collection procedure was started by giving a formal letter to the medical directors of the corresponding hospitals in order to get permission and collect relevant data. The data collection activity was conducted for about three weeks from the starting day. After that, the researcher was administering the questionnaire to the sampled doctors, nurse and anesthesia. Then after, the collected data were and analyzed in accordance with the schedule.

3.8. Methods of Data Analysis

The researcher used both descriptive (frequency and percentage) and inferential statistical (chi-square) analysis in order to achieve the objective of the study. A simple descriptive summary was used to analyze the data.

3.9. Ethical Consideration

A formal letter was obtained from the Department of psychology, Jimma University and submitted to all the concerned bodies to obtain their cooperation. Moreover, all participants of

the study were informed verbally about the objectives and benefit of the study just to secure their informed consent.

The researcher informed the participants that the participation in the study is on voluntary basis and that they can withdraw from the study at any time if they are not comfortable with any of the questions. And in order to keep confidentiality of any information provided by study subjects, no names or other personal identification of the study participants was collected. And also, any data and information given by them are kept confidentially that no one was the opportunity to relate the responses to any one of them.

CHAPTER FOUR: RESULT AND DISCUSSION

4.1. Result

4.1.1. Factors of Stress among Medical Staff Members

The causes of stress were measured in terms of how sampled medical staff members agreed to statements of factors which positively (directly) and negatively (indirectly) are expected to result in some level of stress. With an intention to minimize instrument bias, relatively equal number of positive and negative statements was presented to respondents. Eleven statements which measure satisfaction with work accomplishment have a positive sense and expected to have direct link to stress. while, the remaining eleven were stated in a negative sense as with the case of, for instance, high noise in work area. Therefore, an agreement to the previous positive statements would mean that the approving respondent has a tendency to face stress, while the opposite is true for the later negative statements, and vice versa.

Table 4.1. Factors of Stress among Medical Staff Members

Importance	Factors that cause stress	Frequency (No), and Percentage (%) of Respondents											
		Strongly Disagree		Disagree		Somewhat Agree		Agree		Strongly Agree		Total	
	Positive Statements	No	%	No	%	No	%	No	%	No	%	No	%
	Satisfaction with Work Accomplishment	4	1.7	28	11.7	64	26.7	110	45.8	34	14.2	240	100.0
	Happiness with Work Environment	16	6.7	42	17.5	68	28.3	74	30.8	40	16.7	240	100.0
	Clean and Pollution Free Work Environment	24	10.0	56	23.3	92	38.3	50	20.8	18	7.5	240	100.0
	Adequate Knowledge of Responsibility	10	4.2	6	2.5	40	16.7	116	48.3	68	28.3	240	100.0
**	Satisfaction with Incentives	68	28.3	70	29.2	52	21.7	30	12.5	20	8.3	240	100.0
	Participate in Setting Priority, Deciding Work Method, and Organization Resources Use	18	7.5	16	6.7	76	31.7	102	42.5	28	11.7	240	100.0
	Clear Responsibility	8	3.3	12	5.0	66	27.5	114	47.5	40	16.7	240	100.0
	Treating Clinical Sickness Successfully	4	1.7	2	.8	50	20.8	126	52.5	58	24.2	240	100.0
	Treating Patients Successfully	4	1.7	2	.8	62	25.8	130	54.2	42	17.5	240	100.0
	Treating Psychological Sickness Successfully	14	5.8	20	8.3	80	33.3	96	40.0	30	12.5	240	100.0
	Has Positive Attitude Towards Self	8	3.3	8	3.3	50	20.8	102	42.5	72	30.0	240	100.0
	Negative Statements												
***	High Noise in Work Area	8	3.3	60	25.0	72	30.0	68	28.3	32	13.3	240	100.0
	Difficulty with ICTs	36	15.0	86	35.8	66	27.5	24	10.0	28	11.7	240	100.0
**	Poor Light in Work Area	12	5.0	92	38.3	72	30.0	40	16.7	24	10.0	240	100.0
***	Shortage of Staff	12	5.0	34	14.2	38	15.8	54	22.5	102	42.5	240	100.0
***	Availability of Conflicting Activities in Work Area	16	6.7	42	17.5	84	35.0	58	24.2	40	16.7	240	100.0
***	Unclear Hospital Goal	32	13.3	78	32.5	58	24.2	48	20.0	24	10.0	240	100.0
	Disproportional Salary	102	42.5	56	23.3	24	10.0	46	19.2	12	5.0	240	100.0
***	Doesn't Get Supervisor's Consultation on Tasks	38	15.8	38	15.8	64	26.7	78	32.5	22	9.2	240	100.0
	Uncomfortable Temperature in Work Area	82	34.2	52	21.7	62	25.8	8	3.3	36	15.0	240	100.0
***	Pressurized by Family as a result of working long hours	14	5.8	30	12.5	52	21.7	102	42.5	42	17.5	240	100.0
***	Pressurized by Family as a result of working on holidays	14	11.6	26	11.6	62	25.0	86	35.0	52	16.7	240	100.0
***	Concentration Problem During Duty]	34	14.2	60	25.0	62	25.8	24	20.0	36	15.0	240	100.0

** refers to greater percentage of respondents who approved some level of occurrence of the stress factor on themselves,

*** refers to greater percentage of respondents who shown stronger approval of the stress factor on themselves

The results depicted in the above table show a much more number of negatively stated statements in relation to factor of stress got approval of occurrence with larger number of the respondents. These factor are; High Noise in Work Area, Poor Light in Work Area, Shortage of Staff, Availability of Conflicting Activities in Work Area, Unclear Hospital Goal, luck of Get Supervisor's Consultation on Tasks, Pressurized by Family as a result of working long hours, Pressurized by Family as a result of working on holidays, Concentration Problem During Duty. The only positively stated factor that majority (>57%) of the respondents disagreed about is Satisfaction with incentive.

Medical staff members have shown a strongest agreement towards shortage of staff as a factor of stress followed by pressurized by family as a result of working long hours, and Pressurized by Family as a result of working on holidays. These factors could be observed to excel the others in explaining stress since they are directly or indirectly associated with creating a burden on the medical staff and prohibit him or her from relaxing. A Chi-Square x^2 test was also run to check how the top two most important factors causing stress i.e. shortage of staff and pressurized by family as a result of working long hours do associate with some attributes (such as profession and sex) of respondents. To conduct Chi square test the five point liker scale was merged to three point scales. The strongly disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is. The results are summarized in the following table.

Table 4.2. Relationship between sex and shortage of staff

		Sex				
		Male	female			
		f (%)	f(%)	X^2-Value	df	p
Shortage of staff	Disagree	22(9.2%)	22(9.2%)	12.602	2	.002
	Somewhat agree	38(15.8%)	14(5.8%)			
	Agree	64(26.7%)	80(33.3%)			
	Total	124	116			

With respect to the relationship between sex and shortage of staff, 80 (33.3%) participants agreed that they suffered from sex as a result of shortage of staff, 14(5.8%) agreed that they slightly suffer from sex as a result of shortage of staff and 22(9.2%) reported that they never face sex as a result of shortage of staff. On the other hand, 64(26.7%) participants agreed that they never suffer from sex as a result of shortage of staff, 38(15.8%) participants slightly agree that they did not get sex as a result of shortage of staff and 22(9.2%) reported that they disagree that they never face sex as a result of shortage of staff.

To conduct Chi square test the five point liker scale was merged to three point scales. The strongly disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is.

To check whether there is a statistically significant relationship between felt tired and shortage of staff, Chi square test was conducted. As indicated below the chi square test reveled that there was a statistically significant relationship between sex and shortage of staff, X^2 test (2) = 12.602, P=.002

Table 4.3. Relationship between profession and shortage of staff

		Shortage of staff				
profession	Disagree	Somewhat agree	agree	X^2-Value	Df	P
Medical **doctor**	16(6.7%)	20(8.3%)	54(22.5%)	8.455	4	.076
Nurse	16(6.7%)	12(5.0%)	42(17.5%)			
anesthesio**lo**gist	14(5.8%)	6(2.5%)	60(25.0%)			
Total	46	38	156			

Shortage of staff tends to have mostly affected Anesthesiologist compared to other professionals. Medical Doctors and nurse are recognized lack of staff as an important factor of stress next to Anesthesiologists. To conduct Chi square test the five point liker scale was merged to three point scales. The strongly disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is.

According to the Chi-Square test there is not statistically significant association between shortage of staff worker place and profession at 5% of level of significance.

Table 4.4. Relationship between sex profession and pressure of family as a result of working long hour

	Family pressure of family as a result of working long hour					
profession	Disagree	Somewhat agree	Agree	X^2-Value	Df	P
Medical **doctor**	14(5.8%)	28(11.7%)	48(20.0%)	10.972	4	.027
Nurse	10(4.2%)	14(5.8%)	46(19.2%)			
anesthesio**lo**gist	20(8.3%)	10(4.2%)	50(20.8%)			
Total	44	52	144			

Working for long hours and the resulting family pressure is recognized by medical staff members of different professions are statistically significant at 5% significance level. To conduct Chi square test the five point liker scale was merged to three point scales. The strongly disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is.

It implies that the intensity of pressure coming from family on any of the medical staff working for long hours weakly depends on the type of profession that the staff belongs to. Though the type and source of family pressures might vary – an aspect which is not very well recognized in this study, the results indicated that the family members are less considerate of the long working hours of a medical staff of the family member by the same virtue, the effect of the family pressure appears caused lesser impact on Anesthesiologist compared to the level of impact of shortage of staff across different professions.

4.1.2. Consequences of Stress among Medical Staff Members

In this section of the chapter a summary and discussion of results related to major consequences of stress factors among the medical staff members have been presented. Actually, respondents were asked to show their level of agreement to a list of possible consequences of stress rather than respondents being made to indicate which causes correspond to which consequences. Such correspondence was, however, attempted to be analyzed in terms of running a Chi-Square test between major stress factors identified in the previous section and some of the consequences seen in the table below.

As indicated below in the table, felt tired, felt defensive and felt decreased of job satisfaction were reported by the participants as major consequence of steers. Specifically, 90 (37.5%) respondents reported that they feel tired when they are in stressful situation; 74 (30.8%) respondents reported felt defensive, and 76 (31.7%) felt decreased of job satisfaction.

Table4.5. Distribution of Respondents by Consequences of Stress

Importance	Consequences	Frequency (No), and Percentage (%) of Respondents									
		Very Frequent		Frequent		Occasional		Never		Total	
		No	%	No	%	No	%	No	%	No	%
	Felt Lump Throat	6	2.5	6	2.5	86	35.8	142	59.2	240	100.0
**	Mouth Become Dry	14	5.8	22	9.2	100	41.7	104	43.3	240	100.0
**	Muscle Become Tight	18	7.5	30	12.5	84	35.0	108	45.0	240	100.0
**	Felt Bothered by Headache	20	8.3	26	10.8	88	36.7	106	44.2	240	100.0
*	Felt rushing of blood to head	18	7.5	36	15	66	27.5	120	50.0	240	100.0
**	Face look hot in cold room	24	10.0	34	14.2	80	33.3	102	42.5	240	100.0
*	Bothered by Shortness of Breath without exercise	14	5.8	28	11.7	78	32.5	120	50.0	240	100.0
	Have High Heart Beat	14	5.8	26	10.8	72	30.0	128	53.3	240	100.0
	Felt Damped and Clammy	16	6.7	30	12.5	62	25.8	132	55.0	240	100.0
	Felt Dizzy	20	8.3	36	15.0	50	20.8	134	55.8	240	100.0
**	Upset by Stomach Ache	18	7.5	46	19.2	62	25.8	114	47.5	240	100.0
	Bothered by Heart Beat	12	5.0	42	17.5	60	25.0	126	52.5	240	100.0
**	Has no Appetite	26	10.8	40	16.7	106	44.2	68	28.3	240	100.0
**	Has Sleeping Trouble	24	10.0	38	15.8	94	39.2	84	35.0	240	100.0
**	Difficult to be Happy	18	7.5	34	14.2	100	41.7	88	36.7	240	100.0
**	Lacks Initiative	12	5.0	24	10.0	112	46.7	92	38.3	240	100.0
	Less Productive in Work	10	4.2	26	10.8	72	30.0	132	55.0	240	100.0
	Experienced Absenteeism	14	5.8	34	14.2	70	29.2	122	50.8	240	100.0
**	Felt Worried or Anxious	20	8.3	40	16.7	94	39.2	86	35.8	240	100.0
***	Felt Tired or Exhausted	28	11.7	62	25.8	98	40.8	52	21.7	240	100.0
**	Felt Depressed	24	10.0	46	19.2	80	33.3	90	37.5	240	100.0
***	Felt Decreased in Job Satisfaction	30	12.5	46	19.2	94	39.2	70	29.2	240	100.0

**	Felt Worthlessness	22	9.2	38	15.8	86	35.8	94	39.2	240	100.0
***	Felt Defensive and Angry	20	8.3	54	22.5	82	34.2	84	35.0	240	100.0

Source: Own Survey, 2017

* refers to relatively equal percentage of respondents who felt occurrence and non-occurrence of the stress consequence,

** refers to greater percentage of respondents who felt occurrence of the stress consequence than who never felt, *** refers to percentage of responses to top two most frequently felt consequences

Table 4.6. The relationship between felt tired and shortage of staff

		Felt tired				
		Never	Frequently			
		f (%)	f(%)	X^2-Value	Df	p
Shortage of staff	Disagree	8 (3.3%)	3 8(15.8%)	7.102	2	.029
	Somewhat agree	8 (3.3%)	30 (12.5%)			
	Agree	12 (5.0%)	144(60.0%)			
	Total	28	212			

Felt tired and decreasing job satisfaction was taken for further analysis since these are two top frequently occurring consequences of stress than the rest.

With respect to the relationship between felt tired and shortage of staff, 144 (60.0%) participants agreed that they suffered from tiredness as a result of shortage of staff, 30(12.8%) agreed that they slightly suffer from tiredness as a result of shortage of staff and 38 (15.8%) reported that they never face tiredness as a result of shortage of staff. On the other hand, 12(5.0%) participants agreed that they never suffer from tiredness as a result of shortage of staff, 8(3.3%) participants slightly agree that they did not get tied as a result of shortage of staff and 8 (3.3%) reported that they disagree that they never face tiredness as a result of shortage of staff. To conduct Chi square test the five point liker scale was merged to three point scales. The strongly

disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is.

To check whether there is a statistically significant relationship between felt tired and shortage of staff, Chi square test was conducted. As indicated below the chi square test reveled that there was a statistically significant relationship between felt tired and shortage of staff, X^2 test (2) = 7.102, P=.029

Table: 4.7. The relationship between felt decreasing in job satisfaction and shortage of staff

		Felt in job satisfaction Never	Frequently			
		f (%)	f(%)	X^2-Value	Df	P
Shortage of staff	Disagree	10(4.2%)	36(15.0%)	5.541	2	.063
	Somewhat agree	2(0.8%)	36 (15.0%)			
	Agree	18(7.5%)	138(57.5%)			
	Total	30	210			

With respect to the relationship between decreasing in job satisfaction and shortage of staff, 138 (57.5%) participants agreed that they suffered from decreasing in job satisfaction as a result of shortage of staff, 36 (15.0%) agreed that they slightly suffer from decreasing in job satisfaction as a result of shortage of staff and 36(15.0%) reported that they never face decreasing in job satisfaction as a result of shortage of staff. On the other hand, 18(7.5%) participants agreed that they never suffer from decreasing in job satisfaction as a result of shortage of staff, 2(0.8%) participants slightly agree that they did not get tied as a result of shortage of staff and 10(4.2%)) reported that they disagree that they never face decreasing in job satisfaction as a result of shortage of staff. To conduct Chi square test the five point liker scale was merged to three point scales. The strongly disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is.

To check whether there is a statistically significant relationship between decreasing in job satisfaction and shortage of staff, Chi square test was conducted. As indicated below the chi square test reveled that there was not a statistically relationship between felt decreasing in job satisfaction and shortage of staff, X^2 test (2) = 5.541P=. 063

Table: 4.8. The relationship between family pressure resulting from long working hours and felt tired

		Felt tired				
		Never	Frequently			
		f (%)	f(%)	X^2-Value	Df	p
family pressure resulting from long working hours	Disagree	6(2.5%)	38(15.8%)	9.851	2	.007
	Somewhat agree	12(5.0%)	40(16.7%)			
	Agree	10(35.7%)	134(55.8%)			
	Total	28	212			

With respect to relationship between family pressure resulting from long working hours and felt tired, 134(55.8%) participants agreed that they suffered from relationship between family pressure resulting from long working hours and felt tired, 40(16.7%) agreed that they slightly suffer from relationship between family pressure resulting from long working hours and felt tired and 38(15.8%) reported that they never relationship between family pressure resulting from long working hours and felt tired On the other hand, 10(35.7%) participants agreed that they never suffer from relationship between family pressure resulting from long working hours and felt tired, 12(5.0%) participants slightly agree that they did not get tied as a relationship between family pressure resulting from long working hours and 6(2.5.%)) reported that they disagree that they never face felt tired. To conduct Chi square test the five point liker scale was merged to three point scales. The strongly disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is.

To check whether there is a statistically significant relationship between family pressure resulting from long working hours and felt tired, Chi square test was conducted. As indicated below the chi square test reveled that there was a statistically significant relationship between family pressure resulting from long working hours and felt tired,X^2 test (2) = 9.851P=.007

Table: 4.9. The relationship between family pressure resulting from long working hours and felt decreasing job satisfaction

		Felt decreasing in job satisfaction				
		Never	Frequently			
		f (%)	f(%)	X^2-Value	Df	p
family pressure resulting from long working hours	Disagree	6(2.5%)	38(15.8%)	.096	2	.953
	Somewhat agree	6(2.5%)	46(19.2%)			
	Agree	18(7.5%)	126(52.5%)			
	Total	30	210			

With respect to relationship between family pressure resulting from long working hours and felt decreasing job satisfaction, 126(52.5%) participants agreed that they suffered from relationship between family pressure resulting from long working hours and felt decreasing job satisfaction, 46(19.2%) agreed that they slightly suffer from relationship between family pressure resulting from long working hours and felt decreasing job satisfaction and 38(15.8%) reported that they never relationship between family pressure resulting from long working hours and felt decreasing job satisfaction On the other hand, 18(7.5%) participants agreed that they never suffer from relationship between family pressure resulting from long working hours and felt decreasing job satisfaction, 6(2.5%) participants slightly agree that they did not get tied as a relationship between family pressure resulting from long working hours and 6(2.5.%)) reported that they disagree that they never face felt decreasing job satisfaction. To conduct Chi square test the five point liker scale was merged to three point scales. The strongly disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is.

To check whether there is a statistically significant relationship between family pressures resulting from long working hours and felt tired, Chi square test was conducted. As indicated below the chi square test reveled that there was not a statistically significant relationship between family pressure resulting from long working hours and felt decreasing job satisfaction, X^2 test (2) = .096P=.953

Table: 4.10. The relationship between family pressure resulting from long working hours and felt defensive

		Felt defensive				
		Never	Frequently			
		f (%)	f(%)	X^2-Value	Df	P
family pressure resulting from long working hours	Disagree	7(2.95 %)	40(16.7%)	11.390	2	.003
	Somewhat agree	7(2.95 %)	42(17.5%)			
	Agree	6(2.5%)	138(57.5%)			
	Total	20	220			

With respect to relationship between family pressure resulting from long working hours and felt defensive, 138(57.5%) participants agreed that they suffered from relationship between family pressure resulting from long working hours and felt defensive, 42(17.5%) agreed that they slightly suffer from relationship between family pressure resulting from long working hours and felt defensive and 40(16.7%) reported that they never relationship between family pressure resulting from long working hours and felt defensive On the other hand, 6(2.5%) participants agreed that they never suffer from relationship between family pressure resulting from long working hours and felt defensive, 7(2.95%) participants slightly agree that they did not get tied relationship between family pressure resulting from long working hours and 7(2.95.%)) reported that they disagree that they never face felt and felt defensive . To conduct Chi square test the five point liker scale was merged to three point scales. The strongly disagree and disagree were merged together and labeled as disagree while strongly agree and agree labeled as agree. The somewhat category remained as it is.

To check whether there is a statistically significant relationship between family pressure resulting from long working hours and felt tired, Chi square test was conducted. As indicated

below the chi square test reveled that there was a statistically significant relationship between family pressure resulting from long working hours and felt defensive, X^2 test (2) = 11.390P=.003

4.1.3. Major stress copping strategies utilized by the medical staff members

This third section presents the major stress coping strategies applied by the sampled medical staff members. It is also attempt to show the top most important strategies that successfully assisted staff members to recover from stress. Measuring priories are simply made based on the percentage of responses for each strategy.

Table: 4.11. Frequently and most successfully used stress coping strategies

Importance of Often Used Strategy	**Coping Strategies**	**Frequency (No), and Percentage (%) of Respondents**				**Importance of Successful Coping Strategy**
		Often Used Strategy		**Successful Stress Coping Strategy**		
		No	**%**	**No**	**%**	
***	Physical Relaxation	74	30.8	18	7.5	
	Listening to Music	24	10.0	30	12.5	*
*	Sleeping	48	11.7	88	36.7	***
	Meditation or Deep Breathing	14	5.8	2	.8	
	Drug	4	1.7	8	3.3	
**	Consulting Friends or Other	48	20.0	40	16.7	**
	Trying to study and confront stressor	10	4.2	2	.8	
	Taking Break from Stressor	22	9.2	16	6.7	
	Medication	6	2.5	12	5.0	
	Going for Hobbies	4	1.7	12	5.0	
	Laughing	6	2.5	12	5.0	
	Total	240	100.0	240	100.0	

Source: Own Survey, 2017

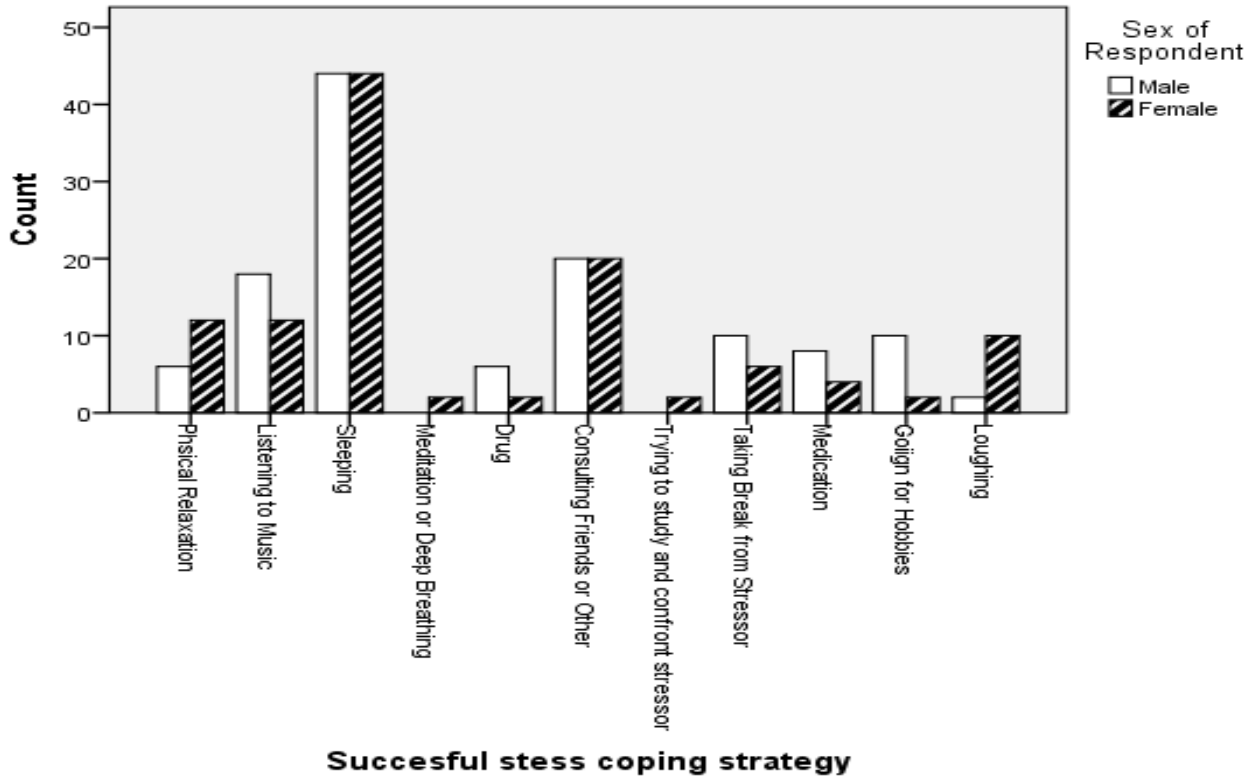
*, **, *** refer 3rd, 2nd, and top most important strategies in order of appearance

Among the options presented to the sampled medical staff, Physical Relaxation is the most frequently used coping strategy followed by Consulting Friends, and Sleeping. Almost a third of

the respondents have to hit Gymnasiums, or go out for a walk or running, or just be still on their place and stretch their physic whenever they feel stressed. Unfortunately, less than a quarter (7.5%) of them have become successful with this strategy and hence, exercising was not found to be among the top most important stress coping strategy for the sampled medical staff members. Listening to music is, though not frequently used strategy, is even a treatment that successfully used by larger number of staff than those who were successful with exercising. The medical staff members are mostly successful to recover from stress through sleeping. They have also gone to friends and other acquaintances for consultations, and found relief.

The issue that could be found of importance in considering success of stress coping strategies is again the type of the successful strategy preferred and used by different categories of the medical staff. Hence, a rough comparative analysis of the responses on the successful coping strategies was made against two variables which are; Sex and Profession. The following graph displays the results.

Graph 4.1. Successful Stress Coping Strategies across Sex of Respondents

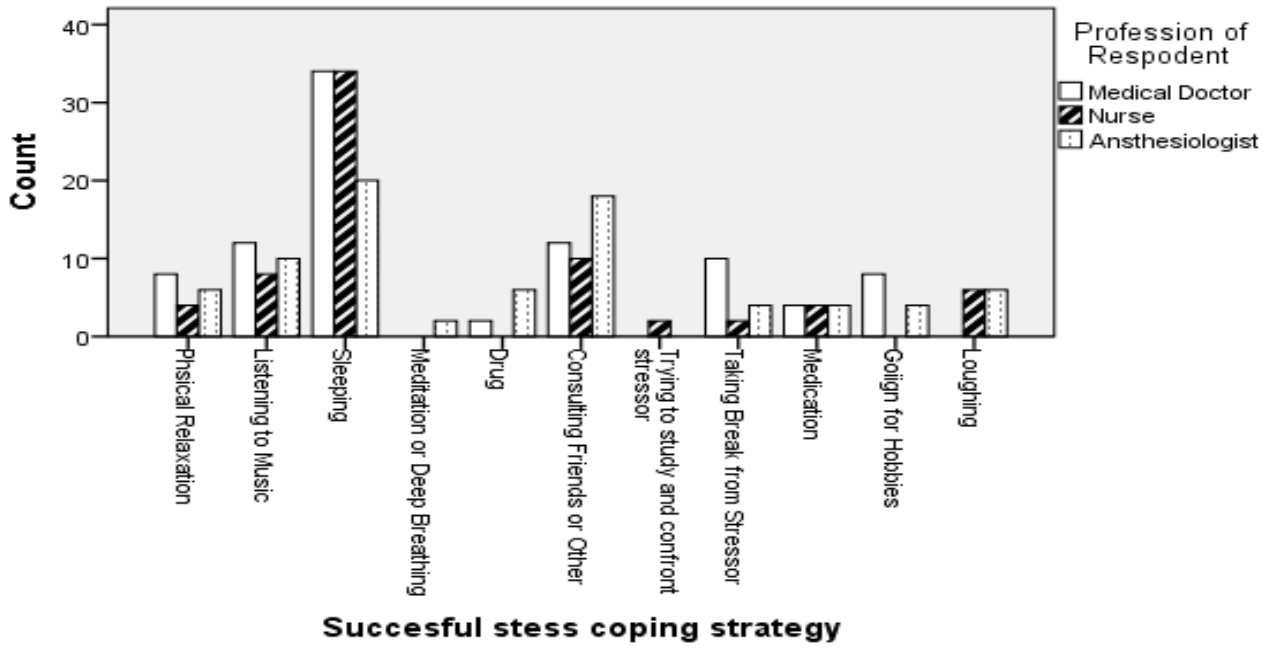


Source: Own Survey, 2017

Accordingly, male and female medical staff members tend to equally apply sleeping as a successful stress management strategy. It is actually uncommon that the findings show male do run to friends or other acquaintances to share their stress just like that of female. Besides, male staff members were found becoming more successful in managing their stress through music compared to their female counterparts. The result also could imply that male tend to have more opportunities or strategies of stress coping strategies than the female medical staff members.

Another comparison of the successful coping strategies was made with different professions. Below is a graph depicting the same

Graph 4.2. Successful Stress Coping Strategies across Profession of Respondents



Source: Own Survey, 2017

Medical Doctors and Nurses are more successful with sleeping as a strategy of coping stress, while Anesthesiologists lack this opportunity comparatively. This could be explained in terms of either they have lesser time to go to bed during stress or might face difficulty of sleeping itself to be a successful stress coping strategy. However, Anesthesiologists are much better successful with consulting friends than the members in the other professions. There is, of course, little

difference among the members from the different professions in being successful to manage stress with music- with a bit better results for Medical Doctors.

Finally, a Chi-Square test was run to see if the stress coping strategies that are often used by the sampled medical staff members might differ based on availability of Participatory Social Clubs organized by their Hospitals. Such clubs are often expected to provide opportunities to members of the organizations to share ideas, and develop social skills, and tap into any other related advantages. The results are summarized under the following table.

4.2. Discussion

In this study effort has been made to investigate stress factors, consequences and coping mechanisms of medical staffs in the selected hospitals of Arsi zone. The result of the analyses presented above which allows answering the research questions posed in the introductory section.

Medical staff members have shown a strongest agreement towards Shortage of Staff as a factor of stress followed by Pressurized by Family as a result of working long hours, and Pressurized by Family as ay result of working on holidays. These factors could be observed to excel the others in explaining stress since they are directly or indirectly associated with creating a burden on the medical staff and prohibit him or her from relaxing. This fact had been confirmed by different Literatures in different areas (Girma, 1995 & Abiy, 2014).

Shortage of staff tends to have mostly affected Anesthesiologist compared to other professionals. Medical Doctors recognized lack of staff as an important factor of stress next to Anesthesiologists. this could be due to staff shortages, high level of responsibility, dealing with the death and the dying, dealing with patient's relatives, coping with the unpredictable, making critical judgment about interventions and treatment, and balancing between work and family commitments (Brien, 2012) .

The result is, however, stronger than how much sampled respondents differ in approving the pressure of family resulting from working long hours. This is parallel to the result of Haynes and Love (2003) they stated that working long hours and having insufficient time with their immediate family may limit the amount of social support that they receive.

In a gendered community like ours, it is also important to study if the behavior of certain professions such as this one (medical), is viewed differently and results in a disparity. Family pressure resulting from long working hours was run across the two sexes. The result shows that there is statistically significant association between pressure of family and sex. Largely due to these kinds of factors, women jobs related to family pressure (International Labor Organization, 2001).

The unique consequences taken for further analysis, in this study, are Lack of Initiative since it is the most occasionally encountered one, and Felt Tired, Felt Defensive, as well as Felt Decreasing Job Satisfaction; since these later ones were the three top frequently occurring consequences to respondents than the rest. inconformity to my finding Addis (2015) work related stress and its causes in Dashen bank SC Besides that, feelings of headache, stomach ulcers and loss of energy Insecurity, Restlessness, Decreasing Job Satisfaction and anger that employees experienced due to different reasons.

Among the options presented to the sampled medical staff, Physical Relaxation is the most frequently used coping strategy followed by Consulting Friends, and Sleeping. Almost a third of the respondents have to hit Gymnasiums, or go out for a walk or running or just be still on their place and stretch their physical whenever they feel stressed .This result is contradicting with result of Selamawit & Goitom (2013). Practice healthy diet system, go to anger management counseling and exercise sports, are not frequently used by the staff as coping mechanisms, respectively. Thus they need to be aware of these coping mechanisms. They may not even have access to these stress coping mechanisms.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

Under this chapter, the findings of the data have been summarized and recommendations were forwarded to help the medical staff of Arsi zone in the selected hospital

5.1 **Conclusions**

In countries like Ethiopia, where the number and training facilities of Medical staff members of different professional ranks and specializations tend to be often limited, they still are positioned with formally stated burdensome roles to play in the health sector. Such limitations coupled with the immense formal and informal expectations yet to be discharged by the medical staff, are imposing a huge challenge on the professionals. Though the national government of Ethiopia has invested a lot over recent years to reduce such challenges, among others, through improving the size and scope of professional trainings, challenges are still prevalent among the medical staff members which ultimately contributing to a measurable level of career and non-career related mental stress and consequent distractions encountered by the professionals. Such challenges, however, have not been given due emphasis under the larger empiricism of medical literature in our countries context and hence this study aimed at identifying the major causes of stress, their consequences, and coping strategies among some medical staff members vis-à-vis Medical Doctors, Anesthesiologists, and Nurses in three Hospitals of Ethiopia vis-à-vis malka oda of Shashemene Town in West Arsi Zone, Assela Referral Hospital of Assela Town in Arsi Zone, and kuyera referral hospital in kuyera town in west Arsi zone

The findings reveal that medical staff members feel stress due to both career and on-career related factors with a different degree of importance. Where 23 questions raised in relation to stress causing factors, and that the medical staff members exhibited strongest agreement towards, above all, Shortage of Staff followed by Pressure of family as a result of working long hours, and Pressurized by family as a result of working on holidays could still be a critical witness for dominance of staff size related stress factors. This might also imply that the national effort to address the limited size of medical professionals through increasing types and number of medical professional trainings in multiple higher learning institutions have either shortcomings in catering the expected capacity of professionals in terms of number or staff's social skills.

On the other hand, and though tested to medium significance level, medical staff members have also shown differences in terms of their feelings against the various causes of stress based on their professional and demographic profiles. Anesthesiologists and female professionals are affected more than their counterparts by the major stress factors aforementioned. This could imply either how limited their size is compared to the expected duty or the higher social affiliations they tend to feel. Finally, all medical staff members found to easily understand and respond to greater number of the interview questions stated in negative senses of stress causing factor rather than positive ones. This feeds an important lesson to be considered during development of research instruments for future studies.

Among the 24 items of questions in relation to major consequences of stress, respondents have agreed to closely three quarter and of course with different degree of impacts. The top four frequently happening consequences of stress are Lack of Initiative, and Feeling Tiresome, Feeling Defensive, as well as Feeling a Decreasing Job Satisfaction. Such consequence become even more troubling as one starts to wonder how a medical professional who is often feeling tired and lacking initiative could behave while dealing with people who with related medical problems or other patients. The same may also correspond with the shortage of provisions to meet their social and personal priorities on the formal and organizational side as the finding indicates that; Tiredness, Job Dissatisfaction, and Defensive feelings have weak association with Family Pressure.

Though a list of preferences were tested under this study, majority of the medical staff members were found to employ the most conventional stress coping strategies. Doing physical exercises, sleeping, and consulting friends are the most frequently used strategies by majority. Though works for few, listening to music is among the successful stress coping strategies, while the most successful is sleeping. It can be generally concluded that medical staff members do have alternative strategies to cope with stress causing factors, and hence it is possible to address medical staff problems related to stress by capitalizing on such strategies and preferences.

5.1. Recommendation

The art of solving a problem is identifying and tackling its causes. A strategic mechanism that address stress related challenges among medical staff members would, therefore, be recommended based on the findings as follow.

- Since shortage staff was found to be the major cause of stress under this study, it is foreseeable that the stress level of medical staff members of different demography and professions could be highly influenced through proper and adequate training and recruitment of additional staff into the Hospitals.
- National or institutional efforts to do the same should also be able to recognize sensitivity of the problem towards professional and demographic differences. In this regard, health policies and interventions should be, for instance, pro-female and pro- Anesthesiologist medical staff members.
- Though the major consequences of stress such as Tiredness, and Job Dissatisfaction appeared to have a weak association with Family Pressure, it would sound vital to enshrine continuous and appropriate forms of provisions and recognitions to meet the social and personal priorities of medical staff members into the formal and organizational settings of the medical institutions.
- Medical staff members' choices and successful experiences of stress coping strategies also gives away to think of the possibility to address stress problems if the medical institutions are able to capitalize on such aspects as, for example arranging suitable time and venues for the staff to exercise and take health breaks. Investing on organizational level recreational areas and establishing social clubs to promote staff's informal engagements is also of paramount importance.
- Finally, it is important to consider some methodological and ontological issues related to stress in the future research. The expected inquiries, for instance, should involve greater diversity of medical professionals and area coverage with locally specific dimensions of stress factors. In the future it is also important that researchers need to conduct qualitative research along with positive and negative statements of stress to have better understanding of stress at medical profession.

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APPENDIX A

The purpose of this study is to assess the factors of stress, copping mechanism and supporting system in the medical staff. Therefore, it is your cooperation that helps the researcher of this study to accomplish the objectives of the study. So, I am kindly requesting you to share your experience and knowledge about stress. The researcher will assure that your personal information will be kept confidential and will be used only for research purpose.

Instruction:-After reading or listening each statement please mark one statement from the listed that most closely matches with your feeling about the factors of stress, coping mechanisms and supporting system from the given value under each Statement, there is no CORRECT or WRONG answer. It is your view point that you will select.

Thank You Very Much for Your Cooperation!

I General Information

1) Medical Doctor
2) Nurse
3) Anesthesiologist
4) Other

Name of the Hospital:

_____

1) Assela teaching hospital2.
2) melka odda hospital
3) kuyera referral hospital

I. Demography

1. Sex A) Male B) Female

2. Age _____

1. Highest Educational Achievement

A) PhD B) MSc/MA. C) BSc/BA
D) Post High School Diploma

4. Marital Status A) Married. B) Divorced C)Widow/Widower
D)Single E) Other

5.number of family size(household size)

II. Factors Related to prevalence of stress among medical staff members

Environmental factors	**Strongly agree**	**Agree**	**Somewhat agree**	**Strongly disagree**	**Disagree**
the level of noise in the areas in which you work is high					
the level of lighting in the areas in which you work is poor					
the temperature of your work area is comfortable					
Difficulties with computer and other technological materials					
happy with you working environment					
The air in your work area is clean and free of pollution					
ORGANIZATIONAL FACTORS					
Staff shortage in workplace					
Do you know exactly which areas are your responsible					
conflicting activities in your career					
clarity of Hospital's goals to you					
participation in hospital level Social groups					
your participation in social groups/networks/clubs outside the hospital					

salary with respect to your effort and time					
Supervisor consult you on decisions that are related to your work task					
satisfied with the incentive system					
relative of manager receive higher salaries and faster promotion					
your responsibilities are clear and you have control of Setting priorities, deciding work methods, and use of resources					
maternal and sick leave permission					
PERSONAL FACTORS					
stress levels in the workplace been affected by your gender					
treat clinical types of sickness					
successful in treating patients					
treat psychological types of sickness successfully					
Your personal accomplishment as a staff of these medical centers (Hospital)?					
pressure from your family because of long work hours and work on holidays					
concentration problems when performing your duties					
positive attitude toward yourself					

III. Questions related to major stress consequences exercised by the medical staff Members at the study area

PHSIOLOGICAL QUENCEQUENCE	NEVER	OCCASIONALY	FREQUENTLY	VERY FREQUENTLY
felt a lump in your throat or a choked-up feeling				
Your mouth became dry				
Feel muscle tight and tense				
bothered by a headache				
felt the rushing of blood to your head				
Is your face look hot when you were not in a hot room or when not involved in physical exercise				
bothered by shortness of breath when you were not working hard or exercising				
high heart beating				
felt damp and clammy				
spells of dizziness				
bothered by stomach upset				
bothered by your heart beat				
loss of appetite				
exercised sleeping trouble at night				
BEHAVIORAL QUENCEQUANCE				
Speak with anyone or withdrawn				
able to patience dealing with other people				
time to relax or enjoy yourself				
it difficult to be happy				
lacked of initiative				

less Productive in your work				
experienced of absenteeism				
Psychological consequences				
Feeling of worried / anxious				
Feeling of tired and /or exhausted				
Feeling of depression				
Feeling of Decrease in job Satisfaction				
Feeling of worthlessness				
Feeling of defensiveness and anger				

Questions Related to examining the quality of supporting systems available to the medical staff members in the relation to stress management.

1. What coping strategy do you often use when you feel stressed?

    1. Physical relaxation
    2. Meditation/Deep breathing
    3. Drug
    4. Consulting friends or other
    5. Trying to study and confront the stressor
    6. Taking a break from the stressor
    7. Medication
    8. Going for Hobbies (Specify)
    9. Laughing
    10. Listening to music
    11. Sleeping
    12. Others

2. Among the above strategies, which helps you cope with stress most successful?