

**EFFECT OF OCCUPATIONAL STRESS ON EMPLOYEE PSYCHOLOGICAL
WELL BEING: A CASE OF MEDICAL PROFESSIONALS IN HOSPITALS IN
BARINGO COUNTY, KENYA**

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**A Research Thesis Submitted to the Graduate School in Partial Fulfilment of the
Requirements of the Award of the Degree of Master of
Business Administration of Egerton University**

AUGUST, 2017

DECLARATION AND APPROVAL

This research thesis is my original work and has not been presented for a degree or diploma in this or any other institution of higher learning.

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This research thesis has been presented for examination with my approval as the university supervisor.

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DEDICATION

I dedicate this study to my entire family for their encouragement, financial and moral support throughout the study period.

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ABSTRACT

Occupational stress is the adverse reaction people have to excessive pressures or other demands placed on them. Its effects can lead to the loss of many man-hours that impact negatively on organizations and the economy of Countries. Although occupational stress is not an illness, it has grievous physical and emotional effects if it is intense or prolonged. The main objective of this study was to examine the effect of occupational stress caused by job stress factors, working relationships and physical working conditions on the psychological well-being of medical professionals in hospitals in Baringo County. The specific objectives of the study were as follows: To determine whether there were differences in occupational stress and psychological well-being on different job groups of medical professionals in hospitals; To determine the effect of job stress factors on employee psychological well-being among medical professionals in hospitals; To determine the effect of social relationships at the workplace on employee psychological well-being among medical professionals in hospitals; To determine the effect of the physical working conditions on employee psychological well-being in hospitals; finally to determine the combined effects of occupational stress factors (job stress factors, social relationships in the workplace and physical working conditions) on employee psychological well-being among medical professionals in hospitals in Baringo County. Stratified random sampling was used to select the respondents of the study forming a total sample of 164 employees. Data was collected using questionnaire method and data obtained was processed using the Statistical Package for Social Sciences (SPSS). Both descriptive and inferential statistics were used in data analysis; that is, Frequencies, means, standard deviation and Percentages which were presented in tables and charts. The results indicated only relationships with colleagues differ significantly based on the professional cadre of the respondents ($p < 0.05$) and insignificant relationship between job stress factors and psychological well-being ($r = 0.058, p > 0.05$). The study also found insignificant relationship between the physical working conditions and psychological well-being ($r = -0.015, p > 0.05$) and insignificant between social relationships and psychological well-being ($r = -0.103, p > 0.05$). The multiple regression analysis showed that the relationship with patients and their families, and relationship with colleagues were the only significant predictors of employee psychological well-being. The study recommends hospital management to create hospital social support systems in order to manage the social and psychological effects of work-induced stress on employees.

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LIST OF ACRONYMS AND ABBREVIATIONS

ANOVA	One-way Analysis of Variance
HSE	Health and Safety Executive
ILO	International Labour Organization
JDC	Job Demand-Control
JDC-S	Job Demand Control-Support
JD-R	Job Demand-Resources
KMO	Kaiser-Meyer-Okin
NGO	Non-governmental Organization
PCA	Principal Component Analysis
SPSS	Statistical Packages for Social Science
VDU	Video Display Unit
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Occupational stress refers to the adverse reaction people have to excessive pressures that can lead to physical and/or emotional ill health (Rees, 1992). It has two major dimensions, namely, physiological stress and psychological stress (Ismail, Yao & Yunus, 2009). While physiological stress is caused by various stressful triggers at the workplace which cause reactions to the body such as headaches, migraines, abdominal pains, fatigue, heart palpitation, sleep disturbance as well as changes in eating, drinking, sleeping and smoking habits, psychological stress is as an emotional reaction to factors in the workplace that cause anxiety, depression, burnout, hostility, anger, irritability and frustration among others.

Consequently, occupational stress impacts the health and psychological well-being of workers which affects their attitude to work, leads to high absenteeism, poor morale, high staff turnover, reduced efficiency and declining job performance (Brandy and Cox, 2002; Elliott & Daley, 2012). The issue of occupational stress has attracted the attention of organizational behaviourists due to the fact that various problems that employees face emanate from work place experiences (Akintayo, 2012). Extensive research has shown that medical personnel are the most vulnerable to stress in the workplace which would be attributed to the nature of their work that is widely acknowledged to be stressful, dangerous, and emotionally demanding (Jones, Janman, Payne, and Rick, 1987; Adu, 2004).

Cox and Griffiths (1995) asserted that psychological ill-health are those aspects of the design, organization and management of work that have the potential to cause physical, psychological or social harm. This co-relates significantly with life events and daily activities such as financial situation, job performance, family conflict, schooling, death and other events. Sullivan, (1993) suggests that although the incidence of accidents is higher within medical officers, their potential to exhibit extreme levels of aggressive and disturbed behaviours are arguably greater. Medical professionals are often assumed to be at greater risk of occupational stress due to their constant exposure to disturbing social issues, and dealing with clients with extreme challenging

behaviours, severe personality disorders, and enduring mental health problems (Thorpe, Righthand, & Kubick, 2001; Bowers, 2005).

Studies have shown that the presence of non-occupational stress and occupational stress create strain in workers, and these influence their morale and psychological well-being negatively (Lester & Brower, 2001; Perdine, Bill & Clement, 1997). When the working environment is perceived to be conducive, there is less stress while psychological well-being is greatly enhanced (Dunhem, 1992; Parkes, 2002). In the United Kingdom, occupational stress is one of the greatest occupational health problems and is estimated to cost organizations four billion pounds annually in associated sickness and absentee costs (Gray, 2000). According to Decker and Webb, (1994) and Felton and Cole (2010) stressful work life was related to receiving psychiatric care, and that in the United Kingdom, the sum of incapacity for men suffering from psychoneurotic and personality disorder, nervousness, migraine headaches, and smoking accounted for 22.8 million work days lost.

1.1.1 Health Care Services in Baringo County

According to Baringo District Strategic Plan 2009 – 2018 (pg. 62), there are 184 health centres/facilities in addition to four (4) district hospitals and one (1) sub-district hospital in Baringo County. Getting to the hospitals in Baringo County in the northern Kenyan Rift Valley is hard because of the poor terrain and lack of road networks. The area is a pastoral zone characterized by nomadic lifestyle and insecurity and the patients hardly seek medical attention at the hospitals. The hospitals, on the other hand, according to the Annual Report (2012) of Kenya Aid, a local NGO, are ill-equipped and understaffed and many times lack essential drugs. Some of the hospitals do not have casualty department, enough wards, any surgical equipment, maternity theatres and fully fledged eye or dental units. Each of the public hospitals handles approximately 60 to 70 inpatients and 150 outpatients daily.

In addition to the poor terrain, the dispensaries, health centres and clinics are scattered in the remote areas, thus discouraging the locals from seeking health services. Further, managing medical emergencies is a challenge since the hospitals lack ambulances while at the same time telephone network coverage is poor thus hampering communication with the hospitals.

Although research has shown that stress has consequences to physical and psychological ill-health (Cooper, 1997) little is known about the role of occupational stress as a determinant of psychological well-being among medical professionals in the organization. It is for this reason that this study examined the effects of occupational stress on employee psychological well-being among medical professionals in hospitals in Baringo County.

1.2 Statement of the Problem

The longstanding occupational challenges that have afflicted medical services in Kenyan public hospitals include shortage of medical staff and inadequate budgetary allocation resulting in shortage of drugs, inadequate facilities and equipment while currently, the devolution of health care services including inadequate health facilities, poor staffing and training, unfair remuneration and underfunding and poor management have further added to the woes of public health services (Baringo County Integrated Development Plan, 2013-2017). These stressors have led to ongoing strikes in the country in demand for better terms of employment and working conditions (HERAF, 2012). These challenges have contributed to occupational stress which has negative effect on employee psychological well-being.

The employees working in occupations where they are expected to deal with the problems of others, especially health care, and law enforcers may suffer more stress than people do in other professions (Finn & Tomz, 1998). This implies that medical employees' are constantly exposed to stress and if not handled effectively, can be destructive both for them in terms of the quality of their work and their physical and mental state and for the organization where they work (Maslach, 2003). Majority of studies have been published on occupational stress (Doan et al, 1995) among different cadres of medical professionals in various categories of public hospitals in Western culture countries, where the working conditions are more superior to those found in public hospitals in Kenya, few of such studies have been done in Kenya, while none in Baringo County (Anna, Pegg & Tores, 2005).

In addition, various studies have been carried out to determine the effect of occupational stress on various work attitudes such as job satisfaction, organisational commitment and turnover intentions of nurses while limited studies investigating the effect of occupational stress on psychological well-being (Seaward, 2005; Newell, 2002; World Health Organization, 2005).

This study fills these gaps by examining the effect of occupational stress on employee psychological well-being in sub-county hospitals and health care centres within Baringo County, Kenya. Therefore, the purpose of this study is to investigate the effect of occupational stress on the psychological well-being of medical professionals in Baringo County, Kenya.

1.3 Objectives of the Study

The general objective of the study was to examine the effect of occupational stress on psychological well-being of medical professionals in hospitals in Baringo County. The specific objectives of the study were as follows:

- i. To determine whether there were differences in occupational stress and psychological well-being on different job groups of medical professionals in hospitals in Baringo County.
- ii. To determine the effect of job stress factors on employee psychological well-being among medical professionals in hospitals in Baringo County.
- iii. To determine the effect of social relationships at the workplace on employee psychological well-being among medical professionals in hospitals in Baringo County.
- iv. To determine the effect of the physical working conditions on employee psychological well-being in hospitals in Baringo County.
- v. To determine the combined effects of occupational stress factors (namely, job stress factors, social relationships in the workplace and physical working conditions) on employee psychological well-being among medical professionals in hospitals in Baringo County.

1.4 Research Hypotheses

H₀₁: Occupational stress and psychological well-being do not differ significantly based different job groups of medical professionals in hospitals in Baringo County.

H₀₂: Job stress factors do not have a significant effect on employee psychological well-being among medical professionals in hospitals in Baringo County.

H₀₃: Social relationships in the workplace do not have a significant effect on employee psychological well-being among medical professionals in hospital in Baringo County.

H₀₄: Physical working conditions do not have a significant effect on employee psychological well-being among medical professionals in hospitals in Baringo County.

H₀₅: The combined effects of occupational stress factors do not have any effect on employee psychological well-being among medical professionals in hospital in Baringo County.

1.5 Significance of the Study

The findings and recommendations of the study shall be applied to other health facilities which are also susceptible to occupational stress, in order to expand and modernize facilities to cope with the growing workload. It will also form the basis for further research to aid academicians and practitioners with knowledge on the relevance of establishing appropriate stress and health management system in the country to help improve employee well-being and how to manage present and prevailing future implications of Human Resource Management towards the realization of enterprise goals.

1.6 Scope of the Study

The study was carried out at four (4) sub county hospitals in Baringo County. It covered three cadres of medical professionals namely; doctors, nurses and clinical officers and lasted for three months starting from 1st March, 2016 to 30th May, 2016.

1.7 Limitation to the Study

The study focused only on four hospitals in Baringo County, meaning generalisations of the findings to other health facilities in Baringo County and other Counties in Kenya was done with caution. The study used self-report questionnaires to collect data, and information collected in the study was based on the participants' honest, perception and emotions at the time of filling the questionnaire. The study was cross-sectional which means that the data was collected at one point in time. This means that the study was unable to determine the long term effect of occupational stress on medical professional psychological well-being.

Future studies should consider longitudinal research design so as to capture the long-term effect of occupational stress on employee psychological well-being. The study used a number of ways to overcome the limitations, such as requesting the medical officers to talk over their concerns, including their personal life and general health.

It also used various data in the hospitals showing either drop in work performance and/or increase in sick days of absenteeism to try to understand the trends and the effects of occupational stress.

1.8 Assumptions of the study

The study made four assumptions as follows: that the respondents were willing to cooperate, respond and provide the information needed willingly without any compulsion; the respondents understood the concept of occupational stress in relation to their psychological wellbeing; that all the staff were qualified in their areas of work; and lastly, that employees understood the stress symptoms and its impacts on them.

1.9 Operational Definition of Terms

Clinical officers – is a licensed practitioner of medicine who is trained and authorized to perform general or specialized medical duties such as diagnosis and treatment of disease.

Doctors– are physicians who work in hospitals, clinics, medical centers, or private practices. They treat people for illnesses and injuries.

Effects of stress – This denotes the most common signs and symptoms of stress and how stress upsets the body.

Medical professionals – Health care providers

Nurses – medical officers who are qualified to care for patients

Occupational stress –unexpected responsibilities and pressures that do not align with a person's knowledge, skills, or expectations, inhibiting one's ability to cope

Physical working conditions – the surroundings within which somebody works, taking into account aspects such as temperature, air quality, lighting, safety, cleanliness, and noise.

Psychological well-being –Refers to the state of good emotional health

Social relationships-is any interaction between two or more individuals

Stress –It is body's way of responding to any kind of demand or threat.

Stress response –Is what happens in one's body when the stress response is activated.

Stress factors –This denotes both internal and external stressors that can trigger the stress reaction

Stressors – The situations and pressures that cause stress are known as stressors

Variables of the study –is defined as anything that has a quantity or quality that varies

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed both empirical and theoretical literature on the key variables of the study namely: occupational stress and psychological well-being. The chapter highlight the theories and models, the definitions and conceptual approaches to understanding stress at work and its effects on employee psychological well-being. Empirical literature review of occupational stress and psychological wellbeing was also presented. Finally, a conceptual framework depicting the relationships among the variables of the study was presented.

2.2 Occupational Stress

Occupational stress is the adverse reaction people have to excessive pressures or other demands placed on them. ‘It is a very imprecise term and it can be explained in terms of its three related concepts, which are anxiety, conflict, and frustration (Segal, 2011). Occupational stress is not an illness in itself, but if it is prolonged or particularly intense it can lead to physical and/or mental ill health (Rees, 1992). Psychological ill-health are those aspects of the design, organization and management of work that have the potential to cause physical, psychological or social harm (Cox & Griffiths, 1995), Gough & McGregor (2007) defined well-being as ‘what people are rationally able to do and to be, and what they have actually been able to do and to be’ (pg. 6).

Stress is encountered both at work and outside it and that some people cope well and others less well with the same stressors depending on their personalities and circumstances (Maslach, Leiter& Schaufeli, 1996). Stressors at home can affect those encountered at work and vice versa. Although employees experience pressure in the workplace, this is not the same as stress since a certain amount of pressure is stimulating and gives satisfaction. However, problems arise when the pressure is too great, goes on for too long or comes from too many directions at once. This leads people to feel that they are losing control, which can lead to stress. It is accepted that individuals who suffer occupational stress over an extended period are more vulnerable to developing physical and psychological health problems. Within the medical profession, occupational stress is considered to be widely present and problematic (Happel, Pinikahama, Martin, 2003).

Stress is a multi-dimensional concept and may be defined based on language and organizational perspectives. In terms of language, it is originally derived from the Latin word that is *stringere*, which refers to draw tight, to describe hardships and/or affliction (Cartwright & Cooper, 1997). It often occurs when individuals' physical and emotional well-being does not match or they cannot handle their job demands, constraints and/or opportunities (Leka, Cox, Ivanov & Kortum, 2004; Ugoji, 2003; Ugoji & Isele, 2009). There are two major types of stress: eustress (good stress) and distress (bad stress) (Fevre, Matheny & Kolt, 2003; Sullivan & Bhagat, 1992). Eustress defines individuals who have experienced moderate and low stress levels and distress is frequently defines individuals who have experienced high stress level. Individuals who experience eustress will be able to meet job demands and this may help them to increase positive work life (e.g., satisfaction and positive moral values). Conversely, individuals who experience distress will not able to fulfil job demands and this may motivate them to decrease quality of work life (e.g., dissatisfaction and negative moral values) (Fevre et al., 2003; Leka et al., 2004; Millward, 2005; Newell, 2002).

In an organizational context, occupational stress is also known as job stress and/or work stress. These terms are often used interchangeably in organizations, but its meaning refers to the same thing (Al Rub, 2004; Larson, 2004). It has two major dimensions: physiological stress and psychological stress. Physiological stress is often viewed as a physiological reaction of the body to various stressful triggers at the workplace which creates the following symptoms: headache, migraine, abdominal pain, lethargy, backache, chest pain, fatigue, heart palpitations, sleep disturbance and muscle ache, as well as changes in eating, drinking, sleeping and smoking habits (Beehr, Glaser, Canali & Wallwey 2001; Critchley, Rotshtein, Nagai et al., 2004; Mansor, Fontaine, & Chong, 2003). On the other hand, psychological stress is often seen as an emotional reaction to various stimuli in the workplace leading to the following reactions: anxiety and depression burnout, job alienation, hostility, depression, tension, anger, anxiety, nervousness, irritability and frustration (Antoniou, 2009; Milward, 2005; World Health Organization, 2005). Studies have shown that employees who are not able to control such stresses may develop negative work attitudes and behaviour (i.e. declining satisfaction, commitment, productivity, quality and health) in the workplace (Seaward, 2005; Newell, 2002; World Health Organization, 2005).

Occupational stress arises from several factors in the workplace. Continual changes in work methods and processes, over production, lack of control over work, complexity and demands of new work systems, job insecurity, low pay or low status, unclear reporting lines, lack of facilities for recreation and exercise, long work hours, lone working, lack of participation in decision making, excessive workload, inadequate staffing, and lack of recognition or promotion, are some of the known stress factors that determine employee psychological well-being (Kircaldy, 1999). Occupational stress occurs when employees' knowledge, skills, abilities and attitudes cannot cope with or do not match to their work demands and pressures in organizations. Consequently, it may decrease the ability of employees to control and manage physiological and psychological stresses and therefore, they cannot meet their duties and responsibilities as members of an organization (Cox, Griffiths, & Rial-González, 2000; Critchley, Rotshtein, Nagai, O'Doherty, Mathias & Dolan, 2004); Fairbrother & Warn, 2003; Mansor et al., 2003).

2.3. Psychological Well – Being

Ryff (1989) defines psychological well-being in two perspectives. The clinical perspective defines well-being as the absence of negative conditions and the psychological perspective defines well-being as the prevalence of positive attributes. In the paper, she affirms that positive psychological definitions of well-being generally include some six characteristics most prevalent in definitions of well-being, which are: the active pursuit of well-being, a balance of attributes, positive effect of life satisfaction, pro-social behaviour, multiple dimensions, and personal optimism.

Each individual responds differently to the varying levels of occupational stress to which they are exposed, but when the stress becomes excessive for the individual, it can result in physical and psychological symptoms. These symptoms vary enormously from one person to another in both frequency and severity; a headache after too many hours spent at a VDU (Video Display Unit) screen at one extreme to stomach disorders, e.g. ulcers and even heart disease at the other. Other symptoms may include: sleeplessness, irritability, backache, neck ache, muscle tension, anxiety, and nausea (www.helpguide.org/mental/stresssigns.html). These are some of the common warning signs and symptoms of stress overload that lead to psychological ill-health. Some stress-related illnesses include: high blood pressure and heart disease.

The diseases affect mainly town dwellers or workers. Examples of the Physical and psychological diseases associated with stress according to Dondo (2006) are, autism, a condition in which a stressed person may start regressing and do things below his expected behaviour, e.g. he may develop poor communication abilities. The person may prefer loneliness or withdrawn from others. Schizophrenia is another psychological disorder associated with loss of contact with reality resulting into poor reception, emotional deviation, motor abnormalities and lack of concentration in work or business. Psychosomatic conditions, which refer to physical symptoms, which affect a person include headache, backache, general aches and pain whose causes are not generally easily diagnosed. Others are anorexia nervosa (loss of appetite and weight), bulimia, a condition where the stressed person vomits after eating and other common diseases that include hypertension, high blood pressure, restlessness and heart attack. There are several factors that may influence psychological wellbeing of workers exposed to particular hazards (Allen, 1987). For people who are closely involved with patients, their well-being is critical because of the influence they may have on the health of the patients. They are also themselves at risk of psychological stress because of their emotional involvement with the patients (WHO Guidelines for Counselling about HIV Infection and Disease, 1990). Medical professionals who deal with patients or those with terminal diseases on a day-to-day basis often suffer psychological distress. Emotional involvement with the patient and the frustration at the lack of effective therapy or equipment can place medical workers at risk of depression, withdrawal and, in extreme cases, suicidal tendencies.

2.4. Theories of Psychological Well-Being

The UK Health and safety Executive (HSE, 2007) has attempted to categorize the key work design factors which may relate to stress-related health issues. These are presented as part of a “Management Standards” framework and include Demands; Control; Support; Relationship; Role; and Organizational change. All these pressures are known as “psychological stressors”, and these have been implicated as risk factors for many physical and psychological problems (Cox and Griffiths, 1995). These outcomes can also have serious consequences for employers, leading to high turnover, absence, strikes, decreased productivity and low morale.

The models that explain psychological well-being are as follows:-

2.4.1 The Job Demand – Control Model

The Job Demand – Control Model (JDC) is currently the most influential model in the workplace and has dominated the field of occupational stress research for more than two decades (Karasek, 1979; Kompier, 2003; Leka, Hassard & Yanagida, 2012). The JDC model postulates that job strain (a component of occupational stress) results from the interaction between psychological job demands and job control. Psychological demands refer to workload, mainly in terms of time pressure and role conflict (Karasek 1985). Job control refers to the worker's ability to control their work activities, through an ability to make decisions about their job and ability to utilize their skills on the job. According to the JDC model, job strain results from pairing combination of high psychological demands with low job control. According to Leka, Jain & World Health Organization (2010), occupational stress increases when employees experience high demands such as role overload and yet have minimal control over their work environment.

The JDC model was later modified to include social support and was renamed the Job Demand–Control–Support (JD-CS) model (Johnson & Hall, 1988; Karasek & Theorell, 1990). The JD-CS model is based on the assumption that social support can moderate the negative impact of job strain on workers' physical and mental health. The model argues that workers who are exposed to job strain with minimal workplace support are most likely to experience poor physical and mental health (Van Der Doef & Maes, 1999).

2.4.2 The Job Demands - Resources Model

The Job Demands-Resources Model (JD-R) categorizes psychosocial factors into the global categories of job demands and job resources which may influence illness and organizational commitment (Llorens, Bakker, Schaufeli, & Salanova, 2006). The model incorporates many working possible conditions, and focuses on both negative and positive indicators of employee well-being. The JD-R model (Demerouti et al., 2001) can be applied to a wide range of occupations, and can be used to improve employee well-being and performance.

The Job Demands Resource Model assumes that every occupation has its specific risk factors associated with occupational stress that can be classified into two categories: job demand and job resources, thus constituting a model that may be expanded and applied to various occupational settings, irrespective of the particular demands and resources involved (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner & Schaufeli, 2001).

Job demands are the physical, psychological, social, or organizational aspects of the job that require prolonged physical and psychological exertion and are associated with certain psychological effects. These include workload, unfavourable physical work environment, and emotionally challenging relations with clients. Job demands are not necessarily negative but they may turn into occupational stress if those demands require high effort from the employee (Meijman and Mulder, 1998). Job resources, on the other hand, refer to the physical, psychological, social or organizational aspects of the job that are operative in achieving work goals, reducing job demands and the associated physical and psychological ill-health. Resources, therefore, are not only necessary to deal with job demands, but they are also important in their own right.

Several models in the occupational health literature agree that occupational stress is a result of a disorder in the balance between the demands employees are exposed to and the resources they have at their disposal. For example, according to job demand control model (Karasek, 1979, 1998), occupational stress is particularly caused by a mixture of high job demands such as work overload, time pressure, and low job control. Therefore, one assertion in the job demand control model is that employees who discretion in deciding for themselves how to meet their job demands do not experience occupational stress such as, job related concerns, and ill-health. (Karasek, 1979).

2.5. Occupational Stress Factors

Studies have shown that workplace determinants of occupational stress include aspects of work content such as workload, pace of work, design of work, role ambiguity, lack of control among others and work context factors such as relationships at work, non-supportive organizational climate, which are potential stressors (Landy, 1990; Cox, 1993).

These stressors emanating from the work environment are likely to negatively influence daily routines, and psychological well-being. Studies have shown that various occupational stressors emanate from work place experiences and that these factors negatively affect workers' behavior and attitudes in terms of organizational commitment, compliance, job satisfaction, job performance effectiveness and achievement of organizational goals (McGratt, 1998; Bakare, 1997; Abiona, 2001). Brandy & Cox (2002) found that occupational stress has impacted the health and psychological wellbeing of workers with the attendant effects on their attitude to work. Further, occupational stress has been found to correlate significantly with life events and daily activities such as financial situation, job performance, family conflict, schooling, death and other events (ILO, Encyclopaedia of Occupational Health and Safety, 2011).

Working environment is perceived to be conducive, there is less stress and the psychological well-being of employees and performance is greatly enhanced (Parkes, 2002). This means that low levels of occupational stress has significant positive effect on workers' health and job performance. The factors that influence occupational stress are discussed below:

2.5.1 Job Stress Factors

According to Reuters (2013), job stress arises where work demands of various types and combinations exceed the person's capacity and capability to cope. Work-related stress can be caused by various events, for example, a person might feel under pressure if the demands of the job (such as hours or responsibilities) are greater than they can comfortably manage. Other sources of work-related stress include conflict with co-workers or bosses, constant change, and threats to job security, such as potential redundancy. What one person may perceive as stressful, however another may view as a challenge.

Whether a person experiences work related stress depends on the job, the person's psychological makeup, and other factors (such as personal life and general health). Freudenberger (1974) found a set of symptoms among medical professionals that included frustration, emotional exhaustion, and physical fatigue, emotional exhaustion, depersonalization, and reduced physical and psychological well-being.

Maslach, Jackson and Leiter (1996) argued that ‘emotional exhaustion’ resulted from drained emotional resources often characterized by tension, anxiety, fatigue, insomnia, and feeling unable to cope with increasing workload. Work- related stress has many causes, including working long hours, heavy workload, and job insecurity, the threat to job loss or redundancy, and conflicts with other workers or bosses. Symptoms of work related stress may include depression, anxiety, and drop in work performance, feeling of being overwhelmed, fatigue, headaches, and increase in sick days of absenteeism. Thus work related stress is a significant health and safety issue (Reuters, 2013).

2.5.2 Physical work conditions

Researchers have identified two clusters of stress-generating factors; those related to the work environment and those related to individual characteristics (Hoyos, 1995). Factors emanating from the physical work environment include factors such as bad lighting, excessive noise, poor lighting, poor temperature control, poor ventilation, poor equipment, poor workstation design, exposure to adverse weather conditions, and exposure to fumes, chemicals or other unpleasant chemicals (Melamed, Luz, Najenson, Jucha, & Green, 1989).

2.5.3 Social support factors

A general theory that has been drawn from many researches over the past few decades postulate that social support essentially predicts the outcome of physical and mental health for everyone (Journal Citation Reports, 2012). The absence of social support shows some disadvantage among the impacted individuals. In most cases it can predict the deterioration of physical and psychological health among the victims. The initial social support given is also a determining factor in successfully overcoming job stress. The presence of social support significantly predicts the individual’s ability to cope with stress.

Knowing that they are valued by others is an important psychological factor in helping employees to forget the negative aspects of their lives, and thinking more positively about their working environment. Social support helps improve a person’s well-being and is a major factor in preventing negative symptoms such as depression and anxiety from developing (Cutrona, Russell, & Rose, 1986).

Osibow & Davis (1988) have proposed that social support resources moderate relationships between occupational stress and psychological strain. The study found that a person suffering from work related stress can help themselves in a number of ways including, making changes at work in order to reduce the stress levels by themselves or with the cooperation with others; talking over their concerns with the employer or human resources manager; or seek professional counselling from a psychologist; or one may need to consider another job or career change.

Cutrona et al. (1986) found that social support and physical health were two very important factors that help the overall well-being of the individual, and that there are six criteria of social support that researchers used to measure the level of overall social support available for the specific person or situation. First, they would look at the amount of attachment provided by a lover or a spouse. Second, measuring the level of social integration that the individuals involved with comes from a group of people or friends. Third, is the assurance of worth from others such as positive reinforcement that could inspire and boost self-esteem? Fourthly, reliable alliance support provided from others, which means that individuals knows they can depend on receiving support from family members whenever it was needed. Fifthly, guidance and assurance of support given to the individual from a higher figure of person such as manager or counsellor, and the last criterion is the opportunity for nurturance. It means the person would get some social enhancement by having children for perpetual continuity.

2.6. Relationship between occupational stress and psychological well-being

Studies have shown that the ability of employees to properly control and manage their physiological and psychological stresses in performing their jobs may lead to higher health and performance in organizations (Antoniou, Davidson, Cooper2003; Fairbrother & Warn, 2003; Stacciarini, 2004).

Recent studies in this area show that the ability of employees to manage their occupational stress may have a significant impact on their psychological well-being. The ability of employees to properly control and manage their physiological stress may lead to higher psychological well-being (Antoniou et al., 2003; Fairbrother & Warn, 2003; Stacciarini, 2004).

Traditional approaches to the study of occupational stress focuses on dominant but separate variables of stress reactions, which include both environmental conditions and person characteristics (Lazarus, 1991). Transactional views stress as a disturbed relation between the individual and his or her environment (Lazarus, 1966; Cox, 1966; Cooper, Cooper & Eaker, (1994), in their stress-model, suggested that the causes of stress may originate in factors intrinsic to the job, organizational roles, relationships with others, career achievements, or in organizational structure and climate. The effects of these stressors may manifest adversely in terms of strain, through psychological and physical ill-health (Rees & Cooper, 1992). Not all individuals will perceive or react to these pressures in the same way. The extent to which stress will impact may be moderated or enhanced by individual personality characteristics.

Friedman and Rosenman (1974) found a relationship between stress-related ailments, e.g. coronary heart disease and person-specific behavioural patterns – hurried sickness, characterized by high achievement striving, competitiveness, impatience and hostility. In addition to these personality variables, biographical and demographic factors such as age and sex may also influence the effects of stress at work. Stress-related ailments are often associated with biological age, and there is evidence for differential levels of vulnerability to stressful situations (Brown, Cooper, & Kirkcaldy, 1994).

2.7. Empirical Studies

According to Babajide & Akintayo (2011) in the study of Occupational stress, psychological well-being and workers' behavior in manufacturing industries in south-west Nigeria, the results revealed that there was a significant influence of occupational stress on psychological well-being of the respondents. A significant difference was not found in the perception of male and female respondents on the influence of occupational stress on their psychological well-being. They concluded that organizational support system that could combat the physical, social and psychological effects of occupational stress on workers' psychological well-being and their behavior should be provided at workplace. They also suggested that industrial counseling services should be introduced in work organizations in order to provide therapeutic services that tend to foster reduction in the effects of occupational stress on workers' psychological well-being.

Terry, Nielsen & Perchard (1993) in a study on the effects of work stress on psychological well-being and job satisfaction 153 employees of a large public sector organization, examined the relationships among levels of work stress, social support, and well-being. The study found that irrespective of the level of stress, levels of supervisor support had main effects on levels of well-being. The study is consistent with Cohen and Wills' (1985) stress-support matching hypothesis which suggest that the availability of work-related support (from one's supervisor) buffered the negative effects of work stress (role conflict and work overload).

Cowman, Ferrari & LiaoTroth, (2004) in their study on the effects of social support on psychological well-being among 221 New York Fire fighters, found that perceived social support partially mediated the relationship between psychological sense of community and care giver satisfaction and fully mediated the relationship between psychological sense of community and care giver stress. This means that in times of stress, fire fighters relied on support resources, to help combat the negative effects of stress.

Adegoke (2011) in study of the effects of Occupational stress on psychological well-being of police employees found out that there were significant effects of work-stress, frustration and depression on psychological well-being of police employees in Ibadan Metropolis. Based on these findings, it was recommended that the government and police organization should endeavor to find means of managing psychological attributes such as emotional labor, psychological well-being, and social networks of their employers.

Basińska (2008) in a study of 121 firemen from rescue firefighting units, observed that Occupational stress had a strong effect on wellbeing were examined. The results showed that persons with lowered psychological well-being experienced a high job stress level. Work overload was also found to be the main factor deteriorating the well-being of the rescue firefighting officers. Therefore the reduction of job stress was important in shaping mental health at the workplace.

Mangwani (2012) in a study of employees' physical and emotional problems that lead to suicidal tendencies, further observed that members of South African police force who had been diagnosed with depression, experienced multiple problems at work and could no longer handle the pressure in the work environment. The study found that multiple problems at workplace that were associated with depression among the police officers included criminal charges, pending or just completed disciplinary hearings or departmental trials against the police. Thus, police officers who experienced these multiple problems suffered from post-traumatic stress, depression, tension, frustration, sadness and loneliness prior to committing suicide.

Malek, Fahrudin, Kamil & Shafinaz (2009) in the study of Occupational stress and psychological well-being among 617 Malaysian firefighters in emergency services, suggested that coping strategies and work motivation are one of the potential moderating variables between effects of stress and job wellbeing.

Ethem, Nurcan, Ediz & Demet (2013) in a study on the effect of Role Stress on the Employee's Well-being among 180 sales representatives working at Pharmaceutical Companies in Izmir, found coping strategies to have a significant correlation with occupational well-being, self-acceptance and occupational growth.

Elliott & Daley (2012) in a study of effects of stress, coping and psychological well-being among 135 forensic health care professionals in the United Kingdom, found that females experienced greater satisfaction, received more support in the workplace and utilised more positive and supported coping mechanism than males. However, unlike the male employees, females found clients challenging behaviour to be more stressful. Further, the study found that most of the forensic health care professionals experienced greater levels of occupational stress due to work-home conflicts, clients challenging behaviour, clients poor skills, low job status, lack of staff support, and bureaucracy.

2.8 Conceptual Framework

The conceptual framework shown in Figure 2.1 depicts the relationships among the variables of the study. The conceptual framework developed from the literature reviewed in this study was based on the effects of the independent variables namely, occupational stress factors on the dependent variables, namely, medical professionals psychological well-being.

Independent variables

Dependent variable

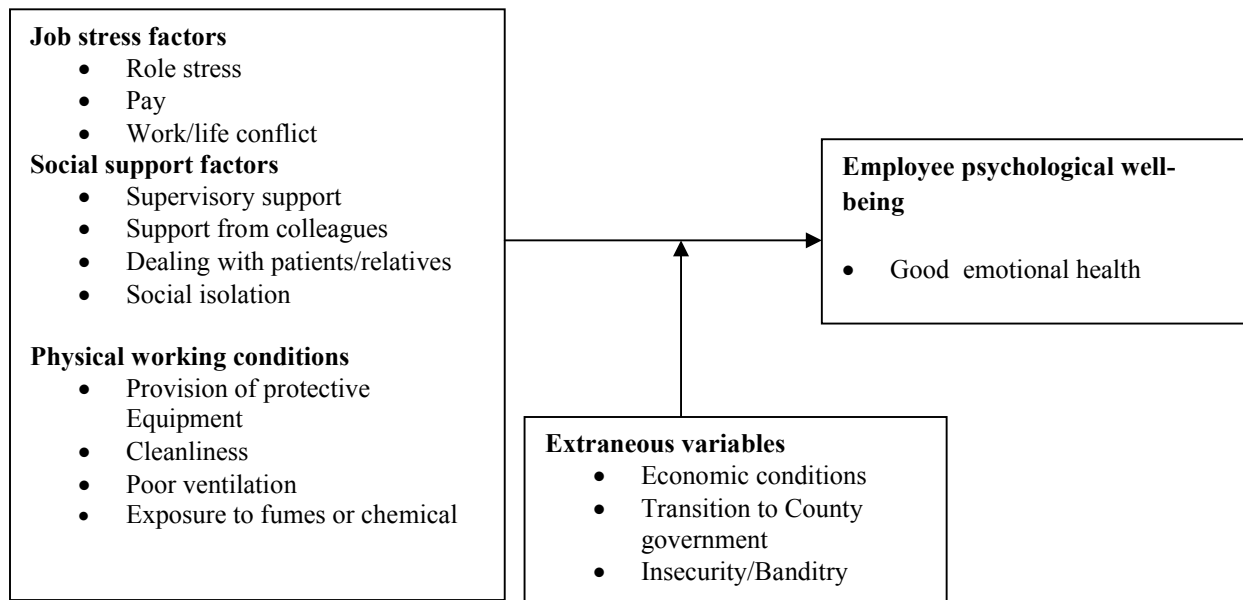


Figure 2.1: The relationship among the occupational stress factors and psychological well-being

Source: Own Conceptualisation, 2017

The independent variables, occupational stress factors, has been conceptualised to consist of job stress factors, social support and physical work condition factors. It is hypothesized that employees who experience low levels of occupational stress have high levels of psychological well-being. Occupational stress factors in this study is conceptualized to emanate from work-related factors such as role overload, job strain, pay, work/family conflict and promotional opportunities which is not managed satisfactorily, give rise to frustrations, depression and anxiety resulting in reduced psychological well-being.

It is therefore hypothesized that occupational stress factors negatively influence medical professionals' psychological well-being. Social support in this study has been conceptualized to consist of supervisory support, support from colleagues, dealing with patients and their relatives and also social isolation. It is postulated that employees who lack social support on the hospitals from their supervisors and colleagues and who have challenges in dealing with the patients and their relatives, experience low levels of psychological well-being.

The physical working conditions has been conceptualised to consist of factors such as provision of protective equipments, cleanliness, ventilations and exposure to toxic fumes or chemicals. It is therefore hypothesised that medical professionals who are dissatisfied with their physical working conditions will experience poor psychological well-being. Economic conditions or factors consisted individual and aggregate income, job security & inflation: uncertainty, powerlessness and helplessness that occurs when an individual lacks the assurances that their job remains stable. It has been stated that job insecurity is the most stressful aspect of the process leading to unemployment with a worse effect on employee's psychological wellbeing.

Transition to County Government has been theorized to consist of devolution in health sector which has tremendous implications among the health professional workers that a majority of them have not been able to cope with like inadequate health facilities, poor staffing and training, unfair remuneration and underfunding. These stressors have led to ongoing strikes in the country with health workers demanding for better terms of employment and working conditions and have contributed to work-related stress which has negatively affected employee psychological well-being.

Finally, Insecurity/Banditry is also an area of concern as the area is a pastoral zone characterized by nomadic lifestyle and insecurity (cattle rustling) provoking collective fear and uncertainty. This fear spreads rapidly and is not limited to the inhabitants who are victims of the cattle rustling but also affects the medical practitioners who cannot live and peacefully work in these insecure areas resulting high levels of stress which has a negative effect on their psychological well-being.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed the procedures that were used in conducting the survey. It was organized as follows: research design, location of the study, the study population, sampling size and technique, data collection instruments and procedures, validity and reliability of research instruments as well as data analysis techniques and presentation.

3.2 Research Design

This study used the correlational research design as it seeks to explore the relationship between occupational stress factors and psychological wellbeing of medical professionals in Baringo County. This kind of design saved time, effort and costs that would otherwise have been incurred in collecting data over several time periods. An in-depth investigation and description of the phenomena was undertaken to systematically classify the variables and describe the factors as accurate and precise. The best practices followed involving a detailed record of behaviour for an extended time period and observe medical professionals in as much detailed and survey or interview different participants. The participants identified were assured of confidentiality and that their privacy was strictly maintained in the study.

3.3 Study location

The study was conducted within four sub-county hospitals in Baringo County in the Rift Valley region. There are four sub-county hospitals at Kabarnet, Marigat, Kabartonjo and Eldama Ravine.

3.4 Study Population

The target population comprised of personnel in the four sub-county hospitals that have a combined force of 279. The list and number of respondents in the district hospitals was obtained from the Medical Officer's office in Kabarnet.

3.5 Sampling Procedure and Sample Size

The sample size of employees studied was determined by the use of the formula developed by Yamane (1967).

Purposive sampling was used to select the four (4) sub-county hospitals as they have high number of employees in the medical professions (namely, doctors, nurses and clinical officers) unlike the medical health centres. Stratified random sampling was used to select respondents from different strata as follows; doctors, clinical officers and nurses, as shown in Table 1. From within each of the strata, systematic random sampling was used to select the respondents of the study. The sample size was determined using the formula developed by Yamane (1967) as follows:

$$n = \frac{N}{1 + N(e)^2} \dots\dots\dots \text{Equation 1}$$

Where: N = Population size take

n = sample size

e= Margin error of the study set at ±5%

Table 3.1: Distribution of Employees by sub-county area and Position

Sub-County area	Doctors	Clinical officers	Nurses	Total
Kabarnet	26	24	91	141
Marigat	1	8	16	25
Kabartonjo	1	6	10	17
Eldama Ravine	9	24	63	96
Total	37	62	180	279

Sample size of population

$$n = \frac{279}{1 + 279(0.05)^2}$$

$$n = \frac{279}{1 + 0.6975}$$

= 164 respondents

The sub-sample of size for each hospital was determined using the formula by Krecjie and Morgan (1970) as follows:

$$s = \frac{XS}{P}$$

Where;

s= Sub-sample size for each branch

X = Population of employees in each branch

S = Total sample size for the study

P = Total population of all the hospital branches based on job category of employees

Kabarnet – S= $141/279 * 164 = 83$ Respondents

Marigat – S = $25/279 * 164 = 15$ Respondents

Kabartonjo – S = $17/279 * 164 = 10$ Respondent

Eldama Ravine S= $96/279 * 164 = 56$ Respondents

The sub-sample of size for each profession for each hospital was determined using the same formula by Krecjie and Morgan (1970) as shown below.

Example Kabarnet:

Doctors = $26/279 * 164 = 15$

Clinical officers = $24/279 * 164 = 14$

Nurses = $91/279 * 164 = 54$

Table 3.2: Distribution of sampled Employees by sub-county area and Position

Sub-County area	Doctors	Clinical officers	Nurses	Total
Kabarnet	15	14	54	83
Marigat	1	5	9	15
Kabartonjo	1	3	6	10
Eldama Ravine	5	14	37	56
Total	22	36	106	164

3.6 Data collection procedure

The study used the survey method for data collection. For the purpose of this study, closed-ended questionnaire was developed to collect data on employees' biographical data, occupational stress and employees' psychological well-being. Following thorough review of the literature, the questionnaire was developed. The questionnaire was made up of three sections as follows: Section A covered questions concerning the bio-data of the respondents; Section B dealt with items on Occupational stress, while Section C contained items on employees' psychological well-being.

The researcher administered set of questionnaires and respondents were given ample time to answer the questions and choosing the most appropriate answers. A covering letter was distributed to all the medical workers working at the hospitals. The researcher obtained an introductory letter from The Dean; Faculty of Commerce of Egerton University which aided acquiring permission from the Medical Officer, Baringo County, to undertake the research. The researcher delivered the questionnaires to the respondents in person and picked them after one week. The respondents were taken through the questions and statements before being asked to complete and return the completed questionnaires. The questionnaires were administered with the permission, cooperation and assistance of the Medical Officer of Health, in charge of the selected hospitals. The respondents' identities however, remained anonymous for ethical reasons.

3.7 Reliability and Validity

Mugenda & Mugenda (1999) defines validity as the accuracy and meaningfulness of inferences, which are based on research results. The study applied content validity as a measure of the degree to which data obtained from the research instruments meaningfully and accurately reflect or represent the theoretical concept. The researcher gave a copy of the questionnaire to the supervisor to check if it represented all the objectives of the study.

Reliability is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Hair, Anderson, Tatham, & Black, 1998). The Cronbach Alpha reliability technique was used to test the reliability of the research instrument. To ensure reliability of the research instrument, a pilot study was conducted at Rift Valley General Hospital, Nakuru. In this regard, 20 questionnaires were administered to medical professionals who were asked to point out items that were ambiguous. Thereafter, the reliability of the questionnaire items was ascertained using Cronbach Alpha Formula. A reliability coefficient of not less than 0.7 is recommended for consistency level (Saunders, Lewis & Thornhill, 2009). The reliability coefficients of the pilot study were above 0.70 which meant that the instrument was reliable. A summary of the reliability coefficients of the main study are shown below:

Table 3.3 Reliability analysis for the study

S/No	Variables	No. of items	Cronbach Alpha Coefficient (α)	Items dropped	Final Cronbach Alpha Coefficient (α)
1	Job stress factors	12	0.760	None	0.760
2	Social relationships	10	0.738	None	0.738
3	Physical factors	8	0.826	None	0.826
4	Psychological well-being	12	0.637	Dropped items 1 and 5	0.709
5	All questionnaire items	42	0.767	None	0.767

3.8 Data Analysis

The data collected from the questionnaire was edited to minimize inconsistencies and errors. This was followed by coding of the data. The analysis was done with the aid of the Statistical Packages for Social Science (SPSS) computer software. The preliminary data was analysed using descriptive statistics in the form of frequencies, means, standard deviations and percentages and presented in the form of tables, and pie charts. Inferential statistical techniques were used to test the study hypotheses at 5% significance level. The techniques that were used are as follows: One-Way Analysis of Variance (ANOVA) which was used to determine whether there were differences in the mean scores of occupational stress and psychological well-being among the three medical professional job cadres. Pearsons correlation analysis that determined the strength and direction of the relationship between occupational stress and employee's psychological well-being. Multiple regression analysis was used to test the effect of occupational stress on psychological well-being.

The Multiple Regression model was developed as shown below:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \varepsilon$$

Where Y = Organizational Performance

a = Constant

b₁- b₅ = Regression coefficients

X₁ = Job stress

X₂ = Social relationships in the workplace

X₃ = Physical working conditions

ε = error term

The results of the analysis were presented using tables.

A summary of the study hypotheses and the statistical techniques is shown below:

Table 3.4: Summary of Statistical Analysis Procedure and Tools

	Hypotheses	Measuring Tool
H ₀₁	Occupational stress and psychological well-being do not differ significantly based different job groups of medical professionals in hospitals in Baringo County.	- One-Way Analysis of Variance (ANOVA)
H ₀₂	Job stress factors do not have a significant effect on employee psychological well-being among medical professionals in hospitals in Baringo County.	- Pearson's Correlation Analysis
H ₀₃	Social relationships in the workplace do not have a significant effect on employee psychological well-being among medical professionals in hospital in Baringo County.	- Pearson's Correlation Analysis
H ₀₄	Physical working conditions do not have a significant effect on employee psychological well-being among medical professionals in hospitals in Baringo County.	- Pearson's Correlation Analysis
H ₀₅	The combined effects of occupational stress factors (job stress, social relationships and physical working conditions) do not have any effect on employee psychological well-being among medical professionals in hospital in Baringo County.	- Pearson's Correlation Analysis - Multiple Regression Analysis

CHAPTER FOUR RESULTS AND DISCUSSIONS

4.1 Introduction

This section presents the descriptive statistics of the responses on effect of occupational stress on employee psychological well-being. The results were analysed using descriptive statistics namely, means and standard deviations in table format. A five point likert scale was used to establish respondent's perceptions on the variables of the study. The results are presented below;

4.2. Response rate

The researcher prepared and issued out 164 questionnaires, and out of 164 questionnaires issued, 162 were filled and returned accounting for 98.78 % of the sample population, which is an acceptable figure. Mugenda and Mugenda (2009) reported that a 50% response rate is adequate, 60% good and above 70% rates as very good.

4.2.1. Descriptive statistics of the responses on effect of occupational stress on employee psychological well-being

a) Gender of the respondents

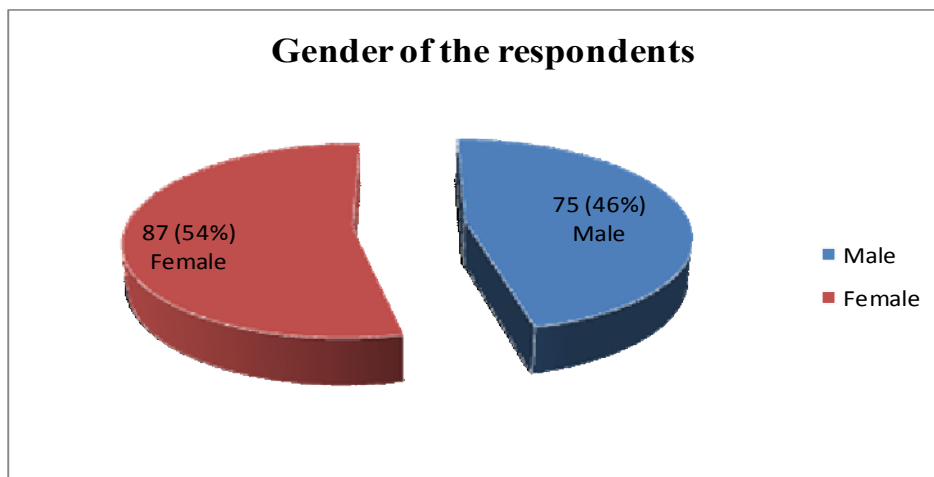


Figure 4.1 Genders of the Respondents.

Figure 4.1 indicates that 75 (46 %) of the respondents were male while 87(54 %) of the respondents were female.

b) Marital status

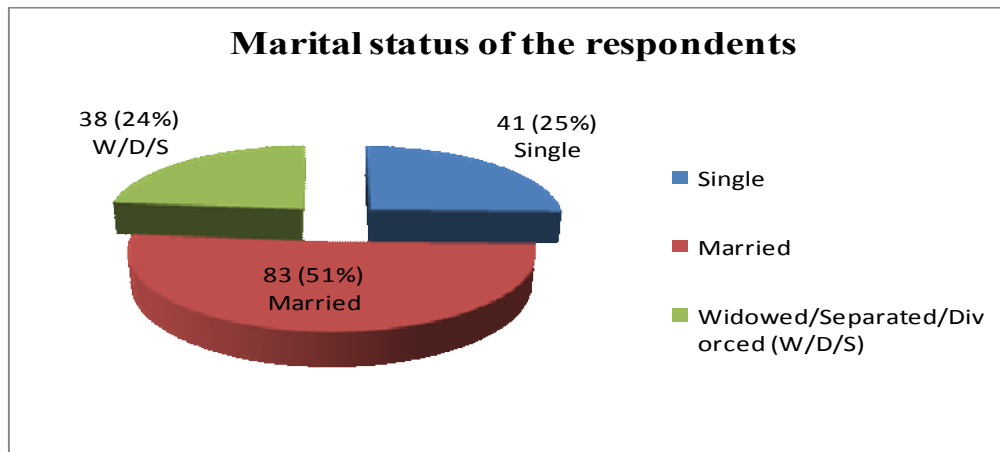


Figure 4.2 Marital status of the respondents

Figure 4.2 above was an analysis of the respondents in terms of their marital status. From 162 respondents, 83 (51%) of the respondents were married, 41 (25%) of the respondents were single while 38 (24%) of the respondents were either widowed, Divorced, or separated.

c) Level of education

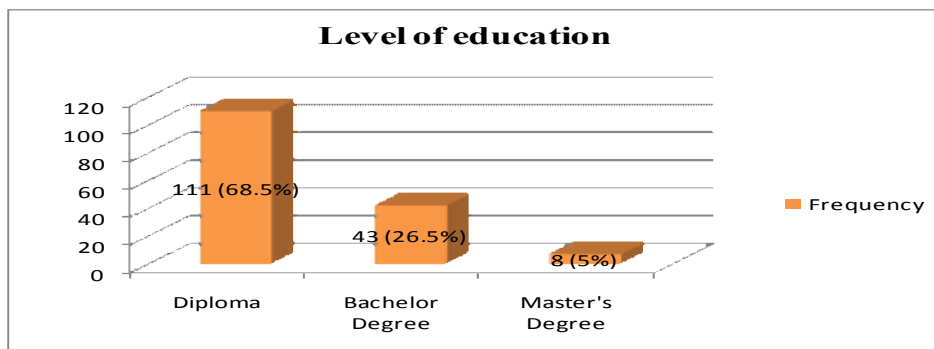


Figure 4.3: Respondent's education level

Figure 4.3 was used to analyse the education levels of respondents. From 162 respondents, 111(68.5%) had attained Diploma level, 43 (26.5%) had attained a Bachelor's Degree and 8 (5%) had Master's Degree qualification.

d) Age of respondents

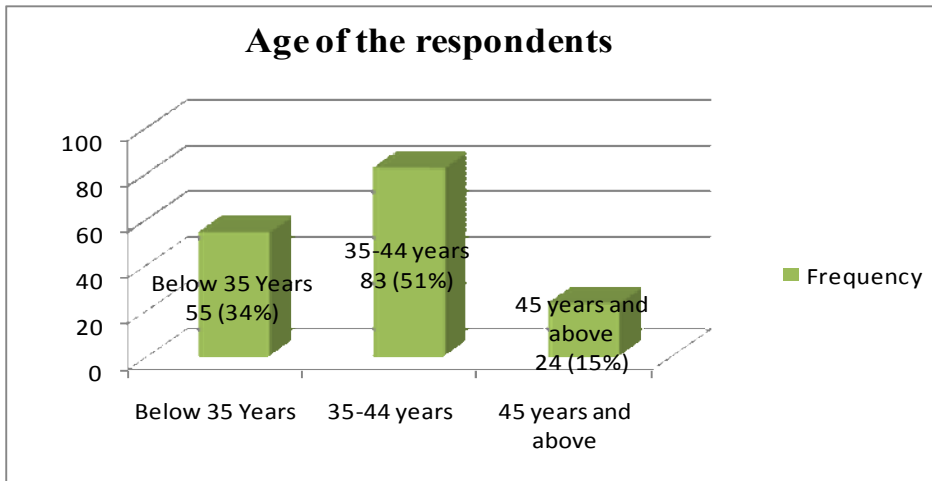


Figure 4.4: Respondent's age level

Figure 4.4 was used to analyse the age level of respondents. From 162 respondents 55(34%) were below age of 35years, 83(51%) were between 35-44 years and 24(15%) were 45 years and above.

e) Profession of the respondents

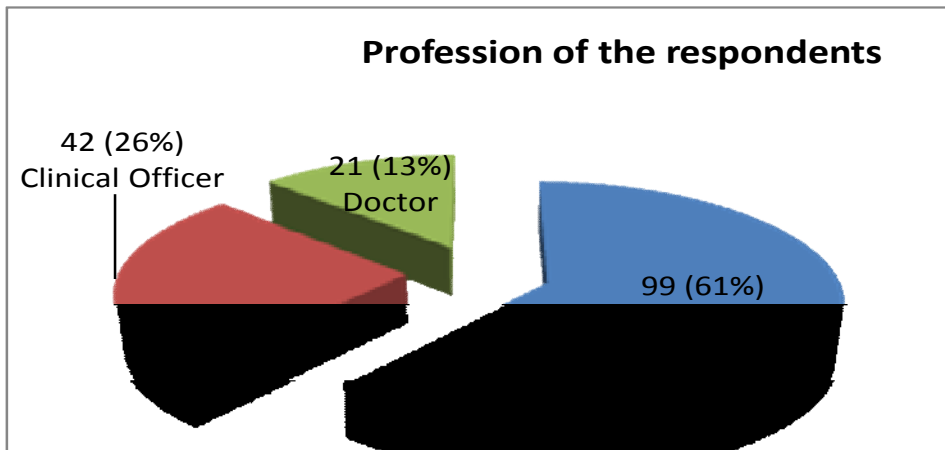


Figure 4.5: Respondent's profession

Figure 4.5 was used to analyse profession of respondents. From 162 respondents, 99(61%) were nurses, 42(26%) were clinical officers and 21(13%) were Doctors.

4.2.2 Descriptive analysis of the responses on occupational stress symptoms, occupational stress factors and psychological well-being

This section presents the descriptive statistics of the responses on the variables of the study. A Three point likert scale where 1=Never; 2= Sometimes; 3=Often was used to establish respondents perceptions on whether they experienced occupational stress symptoms. A five point likert scale where 1=No stress; 2=A little stress; 3=Quite a bit of stress; 4=Very stressed and 5=extremely stressed was used to establish respondents perceptions on job stress factors and social relationships. Finally, a five point likert scale where 1=strongly disagree; 2=Disagree; 3=Uncertain; 4=Agree and 5=Strongly Agree was used to establish respondents perceptions on Physical work factors and Psychological well-being.

4.2.3. Descriptive statistics of Occupational stress symptoms

The respondents were asked to indicate the symptoms of occupational stress, as shown in Table 4.1 above. The questions were on a 3-point likert scale where 1 = Never; 2 = Sometimes; 3 = Often.

Table 4.1: Results of descriptive statistics of responses on occupational stress symptoms

	N	Minimum	Maximum	Mean	Std. Deviation
Changes in appetite	162	1.00	3.00	1.864	.585
Anxiety	162	1.00	3.00	1.852	.420
Erratic moods	162	1.00	4.00	1.648	.570
Low self-esteem/confidence	162	1.00	5.00	1.629	.637
Depression	162	1.00	3.00	1.586	.656
Increased consumption of substances such as tobacco and alcohol	162	1.00	3.00	1.457	.580
Heart disease (Chest pains/palpitations)	162	1.00	3.00	1.420	.543
High blood pressure	162	1.00	3.00	1.420	.531

The mean scores show that the most experienced occupational stress symptoms were change in appetite (M =1.864), (M = 1.852), erratic moods (M = 1.648) and low self-esteem/confidence (M= 1.629). On the other hand, the mean scores showed that the least occurring occupational stress symptoms were increased consumption of substances such as tobacco and alcohol (M = 1.457), heart disease (M = 1.420) and high blood pressure (M = 1.420).

4.3. Descriptive statistics of job stress factors

The respondents were asked to indicate the extent to which various job-related factors were potential sources of stress or no stress. A five point likert scale with the levels where 1 = No stress; 2 = A Little stress; 3 = Quite A Bit of stress; 4 = Very stressed; 5 = Extremely Stressed was used. From the likert scale, the results of the descriptive statistics were interpreted as follows: mean scores below 3.0 suggests that the respondents experienced minimal levels of stress with various aspects of their jobs. On the other hand, mean scores above 3.0 suggests that respondents were highly stressed with various aspects of their jobs. The results are presented in Table 4.2.

Table 4.2: Results of descriptive statistics of responses on job stress factors

	N	Minimum	Maximum	Mean	Std. Deviation
Inadequate staffing coverage in potentially dangerous situations	162	1.00	5.00	3.728	1.142
Delays in the payment of salaries	162	1.00	5.00	3.370	1.270
The worry that there might be further budget cuts	162	1.00	5.00	3.333	1.158
Coping with heavy workload	162	1.00	5.00	3.148	1.352
Working unsocial hours	162	1.00	5.00	3.129	1.058
Dealing with changes in the devolved health service system	162	1.00	5.00	3.043	1.155
The lack of an adequate financial reward for the job	162	1.00	5.00	3.031	1.042
Inadequate security measures on wards/units	162	1.00	5.00	2.919	1.126
Feeling inadequately trained to deal with violent patients	162	1.00	5.00	2.839	1.210
Lack of consultation from management about influential structural changes	162	1.00	5.00	2.438	1.200
Lack of promotion prospects	162	1.00	5.00	2.401	1.100
Inadequate break times/mealtimes	162	1.00	5.00	2.265	0.938

The mean scores show that the factors that contributed to the highest stress levels were “Inadequate staffing coverage in potentially dangerous situations” (M = 3.728), “Delays in the payment of salaries” (M = 3.370), “The worry that there might be further budget cuts” (M = 3.333), “coping with heavy workload” (M = 3.148), “working unsocial hours” (M=3.129), “Dealing with changes in the devolved health service system” (M = 3.043) and “the lack of an adequate financial reward for the job” (M = 3.031).

On the other hand, the mean scores showed that “Lack of consultation from management about influential structural changes” (M=2.438), “Lack of promotion prospects” (M=2.401) and “Inadequate break times/mealtimes” (M=2.265) caused the least amounts of stress among the medical professionals in Baringo.

In summary, the analysis shows that medical professionals were most stressed due to lack of adequate staffing when working in potentially dangerous places. This is consistent with the ongoing security problems in Baringo County due to cattle rustling that has resulted in the deaths of hundreds of people. Further stresses were caused by concerns over finances, structural changes due to devolution of health services and heavy workload.

4.3.1. Descriptive statistics of Social relationships

The respondents were asked to indicate the extent to which relationships in the workplace with supervisors, colleagues, patients and their relatives were potential sources of stress or no stress. A five point likert scale with the levels where 1 = No stress; 2 = A Little stress; 3 = Quite A Bit of stress; 4 = Very stressed; 5 = Extremely Stressed was used. The results are presented in Table 4.3 shows the results of descriptive statistics of responses on social relationships.

Table 4.3: Results of descriptive statistics of responses on social relationships

	N	Minimum	Maximum	Mean	Std. Deviation
Being held accountable for things over which I have no control	162	1.00	5.00	3.556	1.221
Lack of support from the health care administrators	162	1.00	5.00	3.432	1.265
Criticism by a supervisor	162	1.00	5.00	3.259	1.293
Lack of support from my immediate supervisor	162	1.00	5.00	3.167	1.247
Patients and families making unreasonable demands	162	1.00	5.00	3.124	1.313
Having to deal with abusive patients	162	1.00	5.00	3.031	1.089
Having to deal with abuse from patients' families	162	1.00	5.00	2.951	1.085
Difficulty in working with a particular colleague in my immediate work setting	162	1.00	5.00	2.648	1.106
Being the one that has to deal with the patients' families	162	1.00	5.00	2.370	1.141
Difficulty in working with colleagues of the opposite sex	162	1.00	4.00	2.216	1.019

The mean scores above 3.0 has shown that respondents experienced the highest stress levels from relationships in the workplace as follows: “Being held accountable for things over which I have no control” (M=3.556), “Lack of support from the health care administrators” (M=3.432), “Criticism by a supervisor” (M=3.259), “Lack of support from my immediate supervisor” (M=3.167), Patients and families making unreasonable demands (M=3.124) and “Having to deal with abusive patients and patients’ families” (M=3.031).

On the other hand, the mean scores below 3.0 showed that employees experienced minimal stress when working with a particular colleague in their immediate work setting (M=2.648), “Being the one that has to deal with the patients’ families” (M=2.370) and working with colleagues of the opposite sex (M=2.216).

In summary, the analysis has shown that respondents were highly stressed when they were held accountable for things they had not done and when they lacked support from their supervisors. They were also stressed when dealing with unreasonable demands or abuse from patients and their families.

4.3.2. Descriptive statistics of Physical factors

The respondents were asked to indicate the extent to which they agreed or disagreed with the following aspects of their physical work conditions. A five point likert scale with the levels where 1 = Strongly Disagree; 2 = Agree; 3 = Uncertain; 4 = Agree; 5 = Strongly Agree was used. From the likert scale, the results of the descriptive studies were interpreted as follows: mean scores below 3.0 suggests that the respondents are discontented with various aspects of their physical work conditions while mean scores above 3.0 suggests that respondents are relatively satisfied with the physical work conditions. The results are presented in Table 4.4

Table 4.4: Results of descriptive statistics of responses on physical work conditions

	N	Minimum	Maximum	Mean	Std. Deviation
The humidity and temperature of the working environment are appropriate.	162	1.00	5.00	1.957	1.065
The hospital is adequately ventilated	162	1.00	5.00	1.901	1.076
Effective cleaning methods (sterilization and disinfection) are utilized against viruses and other dangerous micro-organisms in the hospitals.	162	1.00	5.00	1.870	0.992
I have been given instructions on how to carry safe work practice and procedures when handling hazardous chemicals in the hospital	162	1.00	5.00	1.864	0.929
Treated drinking water is provided to employees to avoid water borne disease infection.	162	1.00	5.00	1.858	1.240
The working environment is sufficiently lightened.	162	1.00	5.00	1.796	0.899
The hospital is always clean and dry	162	1.00	5.00	1.735	0.904
I am provided with adequate protective garments and equipments at the hospital that will protect me from hazards	162	1.00	5.00	1.722	1.070

The mean scores for the statements on the physical work environment were all below three (3) which is the mid-point in the likert scale which suggests that the respondents were dissatisfied with their physical work conditions. The mean scores show that the respondents disagreed with the statements “The humidity and temperature of the working environment are appropriate” (M= 1.957), “The hospital is adequately ventilated” (M=1.901), “Effective cleaning methods (sterilization and disinfection) are utilized against viruses and other dangerous micro-organisms in the hospitals” (M=1.870), “I have been given instructions on how to carry safe work practices and procedures when handling hazardous chemicals in the hospital” (M=1.864) and “Treated drinking water is provided to employees to avoid water borne disease infection” had a mean of (M=1.858). Further, the respondents disagreed that “The working environment is sufficiently lightened” (M=1.796), “The hospital is always clean and dry” (M=1.735) and “I am provided with adequate protective garments and equipments at the hospital that will protect me from hazards” (M=1.722).

In summary, the analysis showed that the respondents were dissatisfied with the physical work conditions of their hospitals since they were not well-lit, they were not always clean and dry, and that they were not provided with adequate protective clothing and equipments that would protect them from hazards.

4.3.3. Descriptive statistics of Psychological well-being

The respondents were asked to indicate the extent to which they agreed or disagreed with the following aspects of their psychological well-being. A five point likert scale with the levels where 1 = Strongly Disagree; 2 = Agree; 3 = Uncertain; 4 = Agree; 5 = Strongly Agree was used. From the likert scale, the results of the descriptive studies were interpreted as follows: mean scores below 3.0 suggests that the respondents are discontented with their psychological well-being while mean scores above 3.0 suggests that respondents are relatively satisfied with their psychological well-being. The results are presented in Tables 4.5 and 4.6.

Table 4.5: Results of descriptive statistics of responses on negative psychological well-being

	N	Minimum	Maximum	Mean	Std. Deviation
I feel tired, worn out, used up or exhausted	162	4.00	5.00	4.802	0.399
I feel dull or sluggish	162	4.00	5.00	4.599	0.492
I get upset easily or feel panicky	162	3.00	5.00	4.309	0.571
I feel down hearted and moody	162	3.00	5.00	4.154	0.493
I feel afraid for no reason at all	162	3.00	5.00	3.932	0.749
I have crying bouts or feel like it	162	2.00	5.00	3.753	0.765

The mean scores of 3.0 and above as shown in Table 4.5 for the statements on psychological well-being shows that the respondents experienced negative or poor psychological well-being. The following items showed that respondents that the respondents experienced negative/poor psychological well-being as follows: “I feel tired, worn out, used up or exhausted”(M=4.802), “I feel dull or sluggish”(M=4.599), “I get upset easily or feel panicky”(M=4.309), “I feel downhearted and moody”(M=4.154), “I feel afraid for no reason at all” (M=3.932) and “I have crying bouts or feel like it”(M=3.753).

Table 4.6: Results of descriptive statistics of responses on positive psychological well-being

	N	Minimum	Maximum	Mean	Std. Deviation
I have lived the kind of life I wanted to	162	4.00	5.00	4.870	0.337
I have been waking up feeling fresh and rested	162	1.00	5.00	4.364	0.762
I have been happy, satisfied or pleased with my life	162	3.00	5.00	4.296	0.497
I have felt eager to tackle my daily tasks or make new decisions	162	3.00	5.00	4.222	0.722
I have felt I could easily handle or cope with any serious problem or major change in my life	162	3.00	5.00	4.148	0.623
I feel energetic, active or vigorous	162	1.00	3.00	1.673	0.609

On the other hand, the responses to the following items which had mean scores of 3.0 and above showed that the respondents had positive psychological well-being (Table 4.6) as follows: “I have lived the kind of life I wanted to”(M=4.870), “I have been happy, satisfied or pleased with my personal life”(M=4.296), “I have felt eager to tackle my daily tasks or make new decisions” (M=4.222), “I have felt I could easily handle or cope with any serious problem or major change in my life” (M=4.148), and “I have been waking up feeling fresh and rested”(M=4.599). The mean score for the item “I feel energetic, active or vigorous” (M=1.673) showed that the respondents disagreed that they were energetic, active or vigorous.

In summary, the analysis showed that respondents who had positive psychological well-being indicated that they were happy with their personal lives, they had lived the life they wanted and they had the ability to cope with problems or changes. On the other hand, respondents with poor psychological well-being indicated that they felt tired, dull, got easily upset, felt afraid for no reason and also did not feel energetic or active.

4.4. Factor Analysis of Social Relationship Items

Social relationships in the hospitals consist of three categories of persons who closely interact in the workplace namely; supervisors, colleagues, patients and patients families. Since the three groups are not homogeneous, initial correlation analysis showed insignificant correlation between social relationships in the workplace and psychological well-being ($r = -0.103$, $p > 0.05$) when these categories were combined, as shown below.

Table 4.7: Pearson’s Correlation Analysis exploring the relationship among social relationships and psychological well-being

		Social relationship factors	Psychological well-being
Social relationship factors	Pearson Correlation	1	-.103
	Sig. (2-tailed)		.192
	N	162	162
Psychological well-being	Pearson Correlation	-.103	1
	Sig. (2-tailed)	.192	
	N	162	162

Based on these results, factor analysis was performed to determine the number of factors in the social relationships. Factor analysis is a technique which is used to analyse groups of related variables and reducing them into a small number of factors or components. This procedure was used to find out whether different factors could be extracted from the ten items of social relationship items to represent supervisors, colleagues and patients and their families. Three main steps were followed in conducting factor analysis namely; assessment of the suitability of the data; factor extraction, and factor rotation and interpretation (Pallant, 2006).

Prior to performing Principal Component Analysis (PCA), the suitability of the data for factor analysis was assessed (Hair, Anderson, Tatham, Black, 1998; Pallant, 2006). The sample size of this study was above the recommended limit for factor analysis which has been suggested at 10 participants per variable (Field, 2009). Further, the Kaiser-Meyer-Okin (KMO) Measure of Sampling Adequacy was 0.736, which was above the recommended value of 0.70 (Hair *et al.*, 1998; Pallant, 2006; Field, 2009). The results are shown in Table 4.7 below:

Table 4.8: Factor analysis of social relationship items

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.403	34.028	34.028	3.403	34.028	34.028
2	1.664	16.637	50.665	1.664	16.637	50.665
3	1.219	12.186	62.851	1.219	12.186	62.851
4	.856	8.562	71.413			
5	.806	8.060	79.473			
6	.610	6.101	85.574			
7	.491	4.911	90.485			
8	.378	3.779	94.264			
9	.332	3.320	97.584			
10	.242	2.416	100.000			

The factor analysis shows that social relationships had three components with eigenvalues exceeding 1 explaining 34.03%, 16.64% and 12.18% of the variance respectively. In this regard, it was decided to retain three factors for further analysis. Varimax rotation was performed to aid in the interpretation of the three extracted factors, as shown in Table 4.8 below:

Table 4.9: Factor analysis of social relationship items using Varimax rotation

Rotated Component Matrix^a			
Social Relationship Item	Component		
	Factor 1	Factor 2	Factor 3
1. Lack of support from the health care administrators	.854		
2. Being held accountable for things over which I have no control	.829		
3. Criticism by a supervisor	.800		
4. Lack of support from my immediate supervisor	.645		.443
5. Patients and families making unreasonable demands	.454		
6. Having to deal with abusive patients		.832	
7. Having to deal with abuse from patients' families	.431	.735	
8. Being the one that has to deal with the patients' families		.581	-.458
9. Difficulty in working with a particular colleague in my immediate work setting			.803
10. Difficulty in working with colleagues of the opposite sex			.728

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Factors that had correlation coefficients of 0.30 and above were retained. Tabachnick and Fidell (1989, p. 640) recommended that “only variables with a loading of .30 and above are interpreted”.

The social relationship items which loaded on each factor were clustered together and sorted in order of the size of their correlations. These are as follows:-

Factor 1 comprised 5 items. Item One (1) to Four (4) measures medical professional relationships with their supervisors/health administrators. Item Five (5) measures relationship between medical professionals and their Patients and families who make unreasonable demands. The items are as follows: “Lack of support from the health care administrators”, “Being held accountable for things over which I have no control”, “Criticism by a supervisor”, “Lack of support from my immediate supervisor” and “Patients and families making unreasonable demands”. It is not clear why item 5 is in Factor 1 rather than Factor 2.

Factor 2 comprised three items which measures medical professionals’ relationship with the patients and their families. The items are as follows: “Having to deal with abusive patients”, “having to deal with abuse from patients’ families” and “being the one that has to deal with the patients’ families”.

Factor 3 comprised two items measuring relationship with colleagues. The items are as follows: “difficulty in working with a particular colleague in my immediate work setting” and “difficulty in working with colleagues of the opposite sex”.

Consequently from the ten (10) items of social relationships, three (3) new variables were created which were subjected to further statistical analysis as follows:

Factor 1: Relationships with supervisors

Factor 2: Relationships with patients and their families

Factor 3: Relationships with colleagues

4.5 Testing for Multi-collinearity

Multi-collinearity refers to a situation in which two or more independent variables in a multiple regression model are highly linearly related. Multi-collinearity exists when there is a strong correlation between two or more independent variables and this poses a problem when running multiple regressions. According to Field (2009) multi-collinearity exists when correlations between two independent variables are at or in excess of 0.80. Before the multiple regression analysis was carried out, Pearson’s correlation analysis was carried out to rule out multi-collinearity.

In this study, the highest correlation as shown in Table 4.11 was between job stress factors and social relationship factors ($r = 0.472$, $p < 0.001$) which rules out multi-collinearity. In addition, Pallant (2005) reported that Variance Inflation Factor (VIF) value that is above 10 is a sign of multicollinearity. In this study, VIF was between 0.597 and 1.168 which ruled out multicollinearity

4.6. Hypotheses Testing

The testing of hypotheses were subjected to statistical analysis as shown below. One-way Analysis of Variance (ANOVA) was carried out to test Hypothesis One. Pearson Correlation analysis was carried out to test Hypotheses Two to Four. Finally, multiple regression analysis was conducted to test Hypothesis Five.

4.6.1 Results of One-way Analysis of Variance

H₀₁: There are no significant differences in occupational stress and psychological well-being based on different job groups of medical professionals in Baringo County.

One-Way Analysis of variance (ANOVA) was carried out to determine whether there are differences in occupational stress factors and psychological well-being based on the different professional categories, namely, Nurses, Doctors and Clinical Officer.

Table 4.10: Results of ANOVA exploring differences in occupational stress and psychological well-being based on the job category of the respondents

Variables	Professional cadres	N	Mean	Std. Deviation	F	Sig.
Job stress factors	Nurse	99	35.35	7.78	.795	0.453
	Clinical Officer	42	36.81	6.50		
	Doctor	21	34.71	5.87		
Physical work conditions	Nurse	99	14.07	4.88	1.700	0.186
	Clinical Officer	42	15.62	6.06		
	Doctor	21	15.86	6.94		
Social relationship factors	Nurse	99	29.66	6.85	1.864	0.158
	Clinical Officer	42	31.00	6.11		
	Doctor	21	27.71	4.61		
Relationships with supervisors	Nurse	99	16.48	5.00	2.519	0.084
	Clinical Officer	42	17.55	4.61		
	Doctor	21	14.76	2.57		
Relationships with patients and their families	Nurse	99	5.99	2.02	.687	0.504
	Clinical Officer	42	6.17	1.77		
	Doctor	21	5.57	1.54		
Relationships with colleagues	Nurse	99	4.63	1.74	3.225	0.042
	Clinical Officer	42	5.05	1.72		
	Doctor	21	5.62	1.60		
Psychological well-being	Nurse	99	23.57	4.57	0.685	0.506
	Clinical Officer	42	22.71	4.22		
	Doctor	21	23.81	3.41		

The results in Table 4.10 has shown that, with the exception of relationships with colleagues, the mean scores of job stress factors, physical work environment factors, social relationships, relationships with supervisors, relationships with patients and families and psychological well-being did not differ significantly based on the professional cadre of the respondents ($p > 0.05$).

The results show that there was statistically significant differences in the mean scores of relationships with colleagues among the three professional cadres ($F = 3.225$, $p = 0.042$).

The results have shown that the mean scores for Doctors ($M = 5.62$) and Clinical Officers ($M = 5.05$) were significantly higher than that of Nurses ($M = 4.36$).

This suggests that nurses were dissatisfied with their relationship with the doctors and Clinical Officers. It is possible that due to their high hierarchical position in the medical profession, doctors and clinical officers may perceive nurses to be subordinate to them and thus treat them with lack of respect and courtesy.

4.6.2 Results of Pearson Correlation analysis

Hypothesis Two to Four sought to determine the relationship of occupational stress factors on the psychological well-being of selected medical professionals in Baringo County. These hypotheses were tested using Pearson Correlation analysis which determines the strength and direction of the relationships. The Pearson correlation coefficients range from 0 (if no relationship exists) to 1 (for a perfect relationship). Correlation coefficients (in absolute value) which are ≤ 0.35 are generally considered to represent low or weak correlations, 0.36 to 0.67 moderate correlations, and 0.68 to 0.90 strong or high correlations with r coefficients > 0.90 very high correlations (Field, 2005).

Table 4.11: Pearson's Correlation Analysis exploring the relationship among occupational stress and psychological well-being

Variables		Job stress Factors	Physical factors	Social relationship factors	Relationships with supervisor	Relationships with patients and their families	Relationships with colleagues	Psychological well-being
Job stress factors	Pearson Correlation	1	.016	.472**	.450**	.397**	-.018	.058
	Sig. (2-tailed)		.835	.000	.000	.000	.819	.462
	N	162	162	162	162	162	162	162
Physical working conditions	Pearson Correlation	.016	1	-.108	-.276**	.068	.048	-.015
	Sig. (2-tailed)	.835		.172	.000	.393	.548	.847
	N	162	162	162	162	162	162	162
Social relationship factors	Pearson Correlation	.472**	-.108	1	.906**	.697**	.354**	-.103
	Sig. (2-tailed)	.000	.172		.000	.000	.000	.192
	N	162	162	162	162	162	162	162
Relationships with supervisor	Pearson Correlation	.450**	-.276**	.906**	1	.452**	.143	-.021
	Sig. (2-tailed)	.000	.000	.000		.000	.069	.794
	N	162	162	162	162	162	162	162
Relationships with patients and their families	Pearson Correlation	.397**	.068	.697**	.452**	1	.076	-.181*
	Sig. (2-tailed)	.000	.393	.000	.000		.334	.021
	N	162	162	162	162	162	162	162
Relationships with colleagues	Pearson Correlation	-.018	.048	.354**	.143	.076	1	-.309**
	Sig. (2-tailed)	.819	.548	.000	.069	.334		.000
	N	162	162	162	162	162	162	162
Psychological well-being	Pearson Correlation	.058	-.015	-.103	-.021	-.181*	-.309**	1
	Sig. (2-tailed)	.462	.847	.192	.794	.021	.000	
	N	162	162	162	162	162	162	162

*Correlation is significant at the 0.01 level (2-tailed); **. Correlation is significant at the 0.05 level (2-tailed);

H₀₂: Job stress factors do not have significant effect on employee psychological well-being among medical professionals in Baringo County

The study sought to establish whether job stress factors had significant effect on employees' psychological well-being among medical professionals in Baringo County. The results in Table 4.11 showed that there was an insignificant relationship between job stress factors and psychological well-being ($r = 0.058, p > 0.05$). This suggests that job stress factors do not have any significant effect on employee's psychological well-being. This finding is contrary to study by Kircaldy (1999) which found that the presence of work stress created strain on workers which negatively influenced their morale and psychological well-being. Also Dua (1994) found out that apart from physical health and job dissatisfaction, emotional health had direct impact on general stress and occupational stress. Thus, the hypothesis that states that job stress factors do not have a significant relationship on psychological well-being of medical professionals in Baringo County is accepted.

H₀₃: Physical working conditions do not have a significant effect on employee psychological well-being among medical professionals in Baringo County

The study found whether physical working conditions had a significant effect on employee psychological well-being among medical professionals in Baringo County. The results in table 4.11 showed that there was an insignificant relationship between the physical working conditions and psychological well-being ($r = -0.015, p > 0.05$). This suggests that physical working conditions do not have a significant relationship on employee's psychological well-being. This outcome is contrary to findings by Kiliç & Selvi (2009) in a study of the effects of occupational health and safety risk factors on job satisfaction in hotel enterprises, which found that physical work conditions such as humidity, ventilations, temperature, noise among other factors, had significant negative effect on job satisfaction. Thus, the hypothesis that states that physical working conditions do not have a significant relationship on psychological well-being of medical professionals in Baringo County is accepted.

H₀₄: Social relationships do not have a significant effect on employee psychological well-being among medical professionals in Baringo County

The study investigated whether social relationships had a significant effect on employee psychological well-being among medical professionals in Baringo County. The results in table 4.11 showed that there was an insignificant relationship between social relationships and psychological well-being ($r = -0.103, p > 0.05$). This suggests that social relationships had no significant relationship on the psychological well-being of medical professionals.

Following Factor analysis of social relationships, three factors were derived and these were subjected to correlation analysis. Hypotheses testing of the three social groups derived from the factor analysis were carried out as follows:

H_{04a}: Relationships with supervisors do not have a significant effect on employee psychological well-being among medical professionals in Baringo County

The correlation analysis has shown that there was a weak, insignificant relationship between relationship with supervisors and psychological well-being ($r = -0.021, p > 0.05$). This suggests that relationships with supervisors did not have a significant effect on psychological well-being.

The findings is contrary to Gilbreath & Benson (2004) in a study of work and stress which found that social support at work affected psychological well-being because employees whose supervisors were more supportive and considerate tended to have better mental health, while employees who describe their supervisors in negative ways were more likely to have poor health. Thus, the hypothesis which states that relationships with supervisors do not have a significant relationship on employee psychological well-being among medical professionals in Baringo County is accepted.

H_{04b}: Relationships with patients and their families do not have a significant effect on employee psychological well-being among medical professionals in Baringo County

The correlation analysis has shown that there was a weak, significant negative correlations between relationships with patients and their families and employees psychological well-being ($r = -0.181, p < 0.05$). This suggests that employees who dealt with patients and their families had poor psychological well-being due to abuse and unreasonable demands from patients and their relatives.

This is consistent with study by Mooney (2008) which found that there was confusion over the nurse's dealing with the patient's relatives or family members. Similarly, Peter & Laura (2008) found that health professionals who deal with diseases like cancer or death of patients have to deal with a number of complex communication issues for patients, health professionals, and family members resulting in high levels of stress. The primary communication issues centre on imparting distressing information and communicating hope to the patients and their family members which pertain to the medical professional's concealment of feelings, and coping with helplessness, tasks which can be quite stressful. Thus, the hypothesis that states that relationships with patients and their families do not have a significant relationship on employee psychological well-being among medical professionals in Baringo County is rejected.

H_{04c}: Relationships with colleagues do not have a significant effect on employee psychological well-being among medical professionals in Baringo County

The correlation analysis has shown that there was a significant correlation between relationship with colleagues and employees psychological well-being ($r = -0.309, p < 0.05$). This suggests that psychological well-being was negatively affected by poor relationships among the colleagues. This is consistent with the results of One-Way ANOVA in Table 4.9 which showed that nurses were dissatisfied in their relationships with the doctors and clinical officers. A possible explanation is that due to the high hierarchical position that doctors and clinical officers have in the health services as compared to nurses, it is likely that this disparity may result in toxic work relations. This is consistent with Brunetto, (2013) who reveals that poor relationships with colleagues in an organization affect employee psychological well-being. Also Alberta Learning Information Service (2013) states that abusive behaviour among nurses is a significant problem within the profession and is recognized as a major occupational stressor or psychological hazard in the workplace since it creates a toxic environment with serious consequences to victims, bystanders, organizations and patients. Thus, the hypothesis that states that relationships with colleagues do not have a significant relationship on employee psychological well-being among medical professionals in Baringo County is rejected.

4.6.3 Results of Multiple regression analysis

H₀₅: The combined effects of occupational stress factors (namely, job stress, physical and social relationship factors) have no significant effects on employee psychological well-being.

Hypothesis Five was tested using multiple regression analysis. Multiple regression analysis was carried out to establish the extent to which the combined effect of selected occupational stress factors influenced employee psychological well-being among medical professionals in Baringo County. Multiple Regressions was used to explore the predictive relationship between the Independent and the Dependent variables. This method allows one to ascertain how much unique variance in each outcome variable is explained by the predictor variables.

Table 4.12: Results of multiple regression analysis establishing the combined effects of occupational stress factors on employee psychological well-being

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	26.208	2.115		12.394	.000		
Job stress factors	.063	.052	.106	1.219	.225	.732	1.367
Physical factors	.033	.063	.042	.519	.605	.856	1.168
Relationships with supervisor	.091	.089	.099	1.033	.303	.597	1.675
Relationships with patients and their families	-.566	.200	-.248	-2.837	.005	.721	1.388
Relationships with colleagues	-.760	.189	-.305	-4.023	.000	.959	1.043

a. Dependent Variable: Psychological well-being

Model Summary

Model	R	R Square	Adjusted R Square	F (ANOVA)	Sig.
1	.378 ^a	.143	.115	5.189	0.000

b. Predictors: (Constant), Social relationships with colleagues, Job stress factors, Physical factors, Social relationships with patients and their families, Social relationships with supervisor.

The model summary of the regression analysis in Table 4.12 shows that occupational stress accounted for 14.3 % of the variance in employee psychological well-being among the respondents from among medical professionals in Baringo County ($R^2 = 0.143$). This shows that 85.7 % of the variance in employee psychological well-being was explained by factors not in the study. The results indicated that job stress factors, physical working conditions and relationship with supervisors were not significant predictors of employee psychological well-being ($p > 0.05$). The negative standardized beta coefficients indicate that relationship with patients and their families ($\beta = -0.248$, $p = 0.005$) and relationship with colleagues ($\beta = -0.305$, $p = 0.000$) were the only significant predictors of psychological well-being.

The significant negative beta coefficient suggests that employees' psychological well-being was negatively affected when they had poor relationships with the patients and their families and with their colleagues. This is due to the fact that nurses have to multi-task and deal with different demands from colleagues such as doctors, clinical officers, pharmacists, and still be expected to deal with patients and their families who have high expectations on them, thus resulting in toxic work relations with their colleagues. These results are consistent with previous studies that have shown that medical professionals who deal with patients and colleagues on day to day basis often suffer psychological distress (Adler et al., 2008). Similarly, Brunetto, (2013) found that poor relationships with colleagues in an organization affect employee psychological well-being.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Introduction

This chapter provides a summary of major findings of the research. It draws conclusions and makes recommendations on the effect of occupational stress on employee psychological wellbeing on medical professionals in hospitals in Baringo County, Kenya.

5.2 Summary of the results

The general objective of this study determined the effect of occupational stress on psychological well-being of medical professionals in Baringo County. The study was guided by five objectives as follows: The findings showed that there were no differences in the mean scores of job stress factors, physical work condition factors, relationship with supervisor and with patients and their families among the doctors, clinical officers and nurses. However, the results showed that nurses had significantly lower mean scores in relationship with colleagues than doctors and clinical officers. This suggests that due to the high hierarchical position occupied by doctors and clinical officers in the medical profession, they may perceive nurses as subordinate to them and thus treat them with lack of respect and courtesy.

The effects of job stress factors indicated that the job stress factors did not have a significant effect on the employee psychological well-being. This suggests that job stress factors such as lack of adequate staffing when working in potentially dangerous places, delay over payment of salaries, heavy workload and structural changes due to devolution of health services did not have any significant effect on the employee psychological well-being. It also showed that there was no relationship with physical working conditions and psychological well-being. However, the results of the descriptive statistics indicated that the respondents were dissatisfied with the physical working conditions which were poorly lit, not always clean and dry, and that they were not provided with adequate protective clothing and equipment that would protect them from health hazards. The findings also indicate the concept of social relationships which consisted of relationships with supervisors, colleagues and patients and their families. Factor analysis was carried out to establish the number of factors in social relationships. The results showed that there was no relationship with supervisors and psychological well-being.

On the other hand, there were relationship with patients and their families and psychological well-being. This suggests that employees who deal with colleagues, patients' and their family members experienced poor psychological well-being. Finally, the combined effects of social relationships indicated that relationship with patients and their families and colleagues were the only predictors of employee psychological well-being. This is due to the fact that nurses have to multi-task and deal with different demands from colleagues or supervisors such as doctors, clinical officers, pharmacists, and still be expected to deal with patients and their families who have high expectations on them, thus resulting in toxic work relations with their colleagues.

5.3 Conclusion

This study investigated the effect of occupational stress on psychological wellbeing. It found out that relationship with patients and their families, and relationship with colleagues contributed significantly to poor employee psychological well-being. The results of ANOVA showed that with the exception of relationships with colleagues, the mean scores of job stress factors, physical work environment factors, social relationships, relationships with supervisors, relationships with patients and families and psychological well-being did not differ significantly based on the professional cadre of the respondents. The results showed that nurses were more discontented with relationships with their colleagues, namely, doctors and clinical officers. The study found that due to their high hierarchical position, doctors and clinical officers may perceive nurses to be subordinate to them and thus treat them with disrespect and lack of courtesy.

The result of Pearson's correlation analysis showed that Job stress factors had an insignificant relationship on employee psychological wellbeing. This suggest that despite medical professionals experiencing stress due to inadequate staffing, delay of salaries, structural changes as a result of devolution and insecurity in the work place, the employees were able to cope with the situation thus these factors did not have any significant effect on their psychological wellbeing. On physical working conditions, the results of Pearson correlation analysis showed that it had an insignificant relationship with psychological well-being. These findings indicate that, despite the fact that medical professionals were dissatisfied with physical working conditions, like poorly lit, unclean environment and with no provision of adequate protective

clothing and equipments; these factors did not significantly influence the psychological well-being of the medical professionals. With regard to social relationships, Pearson correlations analysis showed that there was an insignificant correlation between the relationships with supervisor and psychological well-being. Factor analysis showed that social relationships consisted of three components, namely, relationship with supervisors, relationship with patients and their families and relationship with colleagues. The results of the Pearsons correlation analysis showed that there was a significant correlation between relationship with colleagues and psychological well-being.

This is consistent with the results of One-Way ANOVA which indicated that nurses were dissatisfied with their relationship with doctors and clinical officers. Due to their high hierarchical position, doctors and clinical officers may perceive nurses to be subordinate to them and thus treat them with lack of respect and courtesy. On the other hand, there was a significant negative correlation between the relationship with patients and their families, and psychological wellbeing. This suggests that employees who dealt with patients and their family members were stressed when dealing with unreasonable demands or abuse from patients and their families. The results of the multiple regression analysis showed that job stress factors, physical working conditions, and relationship with supervisors did not have a significant effect on employee psychological well-being. On the other hand, the relationship with patients and their families, and relationship with colleagues had significant effect on employee psychological wellbeing among medical professionals in hospitals in Baringo County.

5.4 Recommendations

In view of these findings, the following recommendations are therefore suggested:

Organizations that employ nurses should implement programmes to reduce stress because of staff issues and job demands. If these stressors are allowed to continue unattended, they can have negative impact on employee psychological well-being. Specifically, hospital management should create a hospital social support system in order to manage the social and psychological effects of work-induced stress on employees. In addition, counselling services need be introduced in the hospitals in order to provide therapeutic services so as to reduce the effect of work-related stress on workers' health and welfare.

This will also enable employees to understand and cope with the unreasonable demands and expectations of patients and their relatives and also, toxic relations with colleagues. In order to reduce the effect of stress on employee psychological well-being, it is recommended that stress management programs should include the proactive identification of stressors as well as the evaluation of these stressors in terms of severity and impact. Standardized and validated measuring instruments should be used and the exercise should be performed frequently. Early identification of stress risks can provide for the proactive management of risk groups, customized interventions (versus generic interventions), and more effective stress risk control. Managing stress and burnout in the work place could further promote health and well-being and productivity among employees.

5.5 Suggestions for further research

The study has only focused on the effect of occupational stress on employee psychological well-being. Further studies should be carried out to investigate other occupational related variables that may influence employee psychological wellbeing. Also similar study is broadened to medical professionals in other counties in Kenya. Further, future research should also consider longitudinal research in order to capture the development and/or causal connections between occupational stress and psychological health and/or physical health.

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APPENDICES

Appendix I: Letter of introduction

LETTER OF INTRODUCTION

I am a post graduate student at Egerton University, in partial fulfilment of the requirements for the conferment of the Masters of Business management degree. I am conducting a research titled *“The effect of occupational stress on employee psychological well-being among medical professionals in Hospitals in Baringo County”*.

I wish to request you kindly assist in providing the required information, by filling the questionnaire provided, as your views are considered important to the study. Please note that any information given will be treated with utmost confidentiality and will only be used for the purposes of this study.

Thank you

Irene Chepkemai Chepkwony
(Researcher)

Appendix II: Introduction letter from Egerton University

Appendix III: Research of questionnaire

Answer all questions as indicated by either filling in the blank or ticking the options that apply.

SECTION A: DEMOGRAPHIC INFORMATION

1. Please, state:

(a) Age

Below 25 years 25 – 34 years 35 – 44 years

45 – 54 years 55 years and above

(b) Gender Male Female

(c) Marital status: Single Married Widowed/ Divorced/ Separated

(d) Profession: Nurse Clinical officer Doctor

(e) Years worked: Below 1 year 1 – 5 years 6 – 10 years 11 – 15 years
16 years and above

(f) Education level:

Diploma

Bachelor's Degree

Master's Degree

Other (Please specify):-----

SECTION B: OCCUPATIONAL STRESS SYMPTOMS

Please indicate if you are experiencing, or have experienced any of these stress symptoms in the last year by marking the appropriate box. Kindly answer all the statements. Use the scales as shown below:

	1	2	3	
	Never	Sometimes	Often	
1	High blood pressure	1	2	3
2	Anxiety	1	2	3
3	Depression	1	2	3
4	Heart disease (Chest pains/palpitations)	1	2	3
5	Changes in appetite	1	2	3
6	Increased consumption of substances such as tobacco and alcohol	1	2	3
7	Erratic moods	1	2	3
8	Low self-esteem/confidence	1	2	3

SECTION C: OCCUPATIONAL STRESS FACTORS

Please indicate the extent to which the following activities are a potential source of stress or no stress by marking the appropriate boxes. Kindly answer all the statements. Use the scales as follows:

1	2	3	4	5
No	A Little	Quite A Bit	Very	Extremely
Stress	Stress	of Stress	Stressed	Stressed

	ACTIVITIES	1	2	3	4	5
	Job stress factors					
1	Lack of promotion prospects	1	2	3	4	5
2	Inadequate security measures on wards/units	1	2	3	4	5
3	Inadequate staffing coverage in potentially dangerous situations	1	2	3	4	5
4	Feeling inadequately trained to deal with violent patients	1	2	3	4	5
5	The lack of an adequate financial reward for the job	1	2	3	4	5
6	Delays in the payment of salaries	1	2	3	4	5
7	The worry that there might be further budget cuts	1	2	3	4	5
8	Dealing with changes in the devolved health service system	1	2	3	4	5
9	Lack of consultation from management about influential structural changes	1	2	3	4	5
10	Inadequate break times/mealtimes	1	2	3	4	5
11	Working unsocial hours	1	2	3	4	5
14	Coping with heavy workload	1	2	3	4	5

1 **2** **3** **4** **5**
No **A Little** **Quite A Bit** **Very** **Extremely**
Stress **Stress** **of Stress** **Stressed** **Stressed**

Social Relationships in the Workplace						
16	Difficulty in working with a particular colleague in my immediate work setting	1	2	3	4	5
17	Difficulty in working with colleagues of the opposite sex	1	2	3	4	5
19	Lack of support from my immediate supervisor	1	2	3	4	5
20	Criticism by a supervisor	1	2	3	4	5
21	Being held accountable for things over which I have no control	1	2	3	4	5
22	Lack of support from the health care administrators	1	2	3	4	5
23	Patients and families making unreasonable demands	1	2	3	4	5
25	Being the one that has to deal with the patients' families	1	2	3	4	5
26	Having to deal with abusive patients	1	2	3	4	5
27	Having to deal with abuse from patients' families	1	2	3	4	5

SECTION D: PHYSICAL FACTORS IN THE WORK ENVIRONMENT

Please indicate the extent to which you agree or disagree with the following statements by marking the appropriate boxes. Kindly answer all the statements. Use the scales as follows:

1	2	3	4	5
Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

	Physical factors					
1	The working environment is sufficiently lightened.	1	2	3	4	5
2	The humidity and temperature of the working environment are appropriate.	1	2	3	4	5
3	I am provided with adequate protective garments and equipments at the hospital that will protect me from hazards	1	2	3	4	5
4	I have been given instructions on how to carry safe work practice and procedures when handling hazardous chemicals in the hospital	1	2	3	4	5
5	The hospital is always clean and dry	1	2	3	4	5
6	Effective cleaning methods (sterilization and disinfection) are utilized against viruses and other dangerous micro-organisms in the hospitals.	1	2	3	4	5
7	Treated drinking water is provided to employees to avoid water borne disease infection.	1	2	3	4	5
8	The hospital is adequately ventilated	1	2	3	4	5

SECTION E: PSYCHOLOGICAL WELLBEING

Please indicate the extent to which you agree or disagree with the following statements by marking the appropriate boxes. Kindly answer all the statements. Use the scales as follows:

1	2	3	4	5
Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

1.	I have crying bouts or feel like it	1	2	3	4	5
2.	I feel downhearted and moody	1	2	3	4	5
3.	I feel afraid for no reason at all	1	2	3	4	5
4.	I get upset easily or feel panicky	1	2	3	4	5
5.	I feel energetic, active or vigorous	1	2	3	4	5
6.	I feel dull or sluggish	1	2	3	4	5
7.	I feel tired, worn out, used up or exhausted	1	2	3	4	5
8.	I have been waking up feeling fresh and rested	1	2	3	4	5
9.	I have been happy, satisfied or pleased with my personal life	1	2	3	4	5
10.	I have lived the kind of life I wanted to	1	2	3	4	5
11.	I have felt eager to tackle my daily tasks or make new decisions	1	2	3	4	5
12.	I have felt I could easily handle or cope with any serious problem or major change in my life	1	2	3	4	5

Thank you for taking your time to answer the questionnaire.

Appendix III: List of Sub-County Hospitals in Baringo

No	Name of Hospital	Population size (N)
1	Kabarnet	141
2	Marigat	25
3	Kabartonjo	17
4	Eldama Ravine	96
	Total	279