

**EFFECTIVENESS OF GROUP PSYCHOEDUCATION IN MITIGATING  
OCCUPATIONAL STRESS AMONG NURSES IN NATIONAL HOSPITALS  
IN NAIROBI CITY COUNTY, KENYA**

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## DECLARATION AND RECOMMENDATION

I declare that this project is my original work and has not been presented for a degree in any other university or for any other award.

Signature.....

Date.....

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### Recommendation

I confirm that the work presented in this project is conducted by the above-named student under my supervision.

Signature.....

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## **ABBREVIATIONS AND ACRONYMS**

<b>IT:</b>	Information Technology
<b>KNH:</b>	Kenyatta National Hospital
<b>NACOSTI:</b>	National Commission for Science, Technology and Innovation
<b>NH:</b>	National Hospital
<b>SPSS:</b>	Statistical Package for Social Sciences
<b>WHO:</b>	World Health Organization
<b>PSS:</b>	Perceived Stress Scale

## OPERATIONAL DEFINITION OF TERMS

- Occupational Stress:** Denotes the harmful, physical, and emotional responses occurring when the employee's expectations, capabilities and needs are overpowered by job demands.
- Psychoeducation:** It is act of educating patients and their families to enable them handle mental health issues.
- Mitigation:** Mitigation is defined as the measures, techniques and actions taken towards minimizing the extent, frequency and effects of some psychological states and concerns.

## **ABSTRACT**

Occupational stress is a major world health hazard that affect the well-being of workers particularly those involved directly in provision of human services such as nurses and doctors. Studies have reported nursing as one of the most stressful professions. This implies that nurses are at a high risk of experiencing occupational stress compared to other professionals. This research is prompted by many research findings revealing occupational stress as increasingly becoming a new health hazard of workforce globally. This study aimed at establishing the effectiveness of psychological interventions in mitigating occupational stress among nurses in Kenya and Nairobi County in particular. The study used a quasi-experimental design, and it targeted all nurses working in Kenyatta national hospitals and Mathari National Teaching and Referral Hospital within Nairobi County. Simple random sampling technique was used to select 150 respondents for the study. Data was collected using a semi-structured questionnaire. Quantitative data was analyzed using descriptive statistics of mean and standard deviation and a paired t-test. The findings were presented using tables, percentages, and pie-charts. Qualitative data was analyzed thematically and finally findings triangulated to establish the effectiveness of psychoeducation in mitigating occupational stress among nurses in national hospitals. The study found that nurses experienced some forms of occupational stress. The study also found that psychological interventions effectively mitigate occupational stress among nurses working in national hospitals in Nairobi City County. The study concluded psychological interventions effectively reduced levels of occupational stress among nurses. The study recommends that psychological interventions need to been enhanced in national hospitals across the country to reduce occupational stress among nurses.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Across the world nursing is considered amongst the most stressful professions due to tasking working conditions (Gong et al 2014). World health organization (WHO) stated occupational stress as twentieth century illness manifested in almost every workplace across the globe and a 21<sup>st</sup> century killer of workforce (WHO cited in Gatebi, 2013). Occupational stress is increasingly becoming a threat to healthcare and productivity of workforce globally. In our context, occupational stress occurs when job demands exceed employees' expectations and needs (Mohamedkheir, Amara, Balla and Mohamed, 2016). Godwin, Suuk and Selorm (2016) indicated that occupational stress may occur due to heavy workload, poor working environment and job dissatisfaction.

Tajvar et al. (2015) pointed out that, 27% of healthcare workers were suffering from occupational stress and mental health issues in Canada. One third of workers was absent from work due to work related health issues with 30.8% experiencing extremely stressful working days. Occupational stress is associated with reduced productivity, increased sick leaves, job dissatisfaction, labor turnover, occupational accidents, disability pension costs, high compensation costs, absenteeism, low self-esteem and increased management pressure among nurses (Hegney et al., 2015; Seaward, 2013, Faremi, Olatubi, Adeniyi & Salau, et al., 2019). These consequences affected the organizations' productivity and their market competitiveness. In addition, as stated by Seaward (2013), occupational stress among nurses contributes to poor wellbeing.

Organizations may not prevent worker stress arising in their personal lives, but they can prevent them from stress arising in the workplace. Considering occupational stress level and its effect on nursing profession, the health sector across the globe has developed psychological interventions such as psychoeducation and group counseling to mitigate occupational stress among nurses. Through the established interventions, occupational stress may be mitigated to improve health wellbeing of nurses (LaMontagne & Keegel, 2012). In recent decades, we have witnessed various interventions being established by different organizations to curb increasing occupational stress among workers (Krishnan, Ram, Hridya and Santhosh, 2018). As a result, the management of occupational stress among workers has become top agenda for many organizations.

A study conducted by Oommen Joshy (2014), revealed various interventions such as workers training, work schedule, modifying organizational structure and working environment were used for stress management among information technology workers. The research findings also revealed those interventions for occupational stress were not accessed by majority of workers. According to a Nigerian study on occupational stress management among nurses, various interventions were mentioned. These interventions included breaks, relaxation, physical exercise, meditations which were used by nurses as way of managing stress. The results further indicated that, most nurses managed their occupational stress by adjusting their attitudes, feelings, and standards on stressors (Kurki, 2018). These studies failed to focus on effectiveness of psychoeducation in mitigating occupational stress particularly among nurses.

Ojwang (2012) who conducted a study in Kenya, suggests that, across the country health workers were trained on stress management and coping strategies during their

professional training. In addition, employee assistance programs which were work-based programs in government health facilities had been set across the country. They act as an early intervention strategy by providing timely, appropriately, confidential, and professional counseling and referral services for nurses. Such programs help them to identify and resolve any personal and professional health related issues. The availability of these programs ensures nurses can access work-based counseling services for any issues that may have negative effect on healthcare (Ojwang, 2012). This calls for a study to investigate the effectiveness of stress management strategies.

Some of psychological interventions established by various governments to mitigate occupational stress included psychoeducation. Psychoeducation, on other hand, involves educative programs given to people suffering from mental illness like stress, depression and so on or terminal illnesses like diabetes, cancer, and hypertension to manage their conditions (Corey 2011). Psychoeducation is given on a regular basis which involves training sessions, discourse sessions and reflection assignments. Ojwang (2012) stated workplace counseling as one of the best psychological interventions to reduce occupational stress among workers. One may wonder, why levels of occupational stress are still high despite studies showing psychological intervention are in place.

Studies have been carried out on the effectiveness of psychoeducation in intervening against different forms of stressors. Krishnan, Ram, Hridya and Santhosh (2018) carried a study among caregivers of children with mental issues to establish the effectiveness of psychoeducation on their self-determination and psychological wellbeing. Psychoeducation was found to improve their mental well-being together

with their levels of self-determination. Alzahem, Van der Molen and De Boer (2015) evaluated the effectiveness of a program on dental student's stress management in Saudi Arabia which was based on psychoeducation. The findings of this study reported psychoeducation effectively reduced stress among neonatal students. Despite all these measures to mitigate occupational stress among nurses, stress levels are said to be high among nurses across the country (Mcknight, Nzinga, Jepkosgei & English, 2020). The question remains, whether the established psychoeducation interventions were effective in mitigating occupational stress among nurses in national hospitals.

Recently we have witnessed unending nurses' strikes across the country amid covid-19 pandemic as reported by Manyibe (2021) in an article in daily nation newspaper. We have also experienced incidences of unprofessionalism of nurses in many health facilities across the country with the latest being where a patient at Kenyatta National Hospital (KNH) was operated on the head while the right patient was left in the ward. During the day nurses prepared wrong patients for operation at KNH, in that ward nurses were only two against sixty-one patients. Nurses suggested change of hospital systems to address their needs to enable them work effectively (Njeru, 2018). There have also been reports of nasty experiences such as nurses talking rudely to patients and even mishandling them which may be indicators of occupational stress among nurses.

It is evident from the above cases; occupational stress is present among nurses despite government's efforts to mitigate it through psychological interventions. Recent studies point out that, symptoms of occupational stress among nurses are rapidly increasing across the world. Different governments' particularly Kenyan government has

established various interventions on occupational stress among nurses. Despite all these, occupational stress is ever increasing among nurses thus affecting their wellbeing (Khamisa, Oldenburg, Peltzer & Ilic, 2015). Ojwang (2012) Stated psychological interventions as the best occupational stress management strategies. (Gong et al., 2014) reported nurses to experience levels of occupational stress regardless of such interventions. Due to this discrepancy between effectiveness of psychological interventions and high levels of occupational stress there was need for study to establish the effectiveness of psychoeducation in mitigating occupational stress among nurses particularly in national hospitals.

## **1.2 Statement of the Problem**

Worker's holistic wellbeing is very vital to any organization or institution across the world to achieve its goals and objectives. Workers in health sector are not exceptional from occupational stress considering their work environment. In order to ensure quality healthcare of nurses, every hospital is supposed to ensure that nurses wellness is maintained by provision of psychological interventions. In this case, nurses working in hospitals require to be provided with effective interventions to remain healthy. One of these measures is to provide psychoeducation and group counseling using cognitive behavioral therapy on a regular basis.

Globally, there are assed studies to establish the degree of occupational stress among nurses. Studies like Njeru (2018), Kurki (2018), Krishnan, Ram, Hridya and Santhosh (2018) have shown that nurses experience occupational stress which negatively affects their wellness. However, most of these studies have been conducted in different

contexts from current studies which limits their generalization. Group counselling and Psychoeducation has been found to reduce stress among nurses and other hospital staff. Occupational stress is reported to be ever increasing regardless of the studies indicating group counseling and psychoeducation effectiveness in mitigating occupational stress. There was need for current study to establish the effectiveness of group counseling and psychoeducation. The current study sought to fill the gap by establishing the effectiveness of group counseling and psychoeducation in mitigating occupational stress among nurses in national hospitals in Kenya.

### **1.3 Purpose of the Study**

The aim of the study was to identify effectiveness of group counseling and psychoeducation in mitigating occupational stress among nurses in national hospitals in Nairobi City County, Kenya.

### **1.4 Study Objectives**

1. To establish the level of occupational stress among nurses in national hospitals in Nairobi City County.
2. To establish the effectiveness of psychoeducation in mitigating occupational stress among nurses in national hospitals in Nairobi City County.
3. To find out possible measures in mitigating occupational stress among nurses in national hospitals in Nairobi City County

## **1.5 Study Hypothesis**

H<sub>0</sub>1: There is no significant effect of group counseling in mitigating occupational stress among nurses in national hospitals in Nairobi City County.

H<sub>0</sub> 2: There is no significant effect of psychoeducation in mitigating occupational stress among nurses in national hospitals in Nairobi City County.

## **1.6 Justification and Significance**

Studies have been conducted to establish the effectiveness of psychological intervention in mitigating occupational stress. The findings showed that, psychological intervenes effectively reduce occupational stress. However, the researcher came across few studies that had examined the effectiveness of the interventions used in few tested the effectiveness of the various interventions and so there was need to carry out the study. The current study was important to identify effectiveness of psychological interventions in mitigating occupational stress among nurses in national hospitals in Nairobi City County, Kenya. It provides an evidence base for improving the interventions in different health centers in the county and across the country. This benefits all the nurses working in national hospitals across the country. Consequently, patients receive better and improved health services from nurses in national hospitals across the country. When nurses 'wellbeing and mental health status is stable, they are likely to offer quality and timely interventions to their patients.

Again, nurses may be more sensitive on signs and impact of occupational stress which may propel them to seek psychological interventions at a nearly stage to stay healthy. The study findings may be beneficial to the hospital administrators and managers in

national hospitals in Kenya in adopting healthcare policies focusing on mitigation of occupational stress.

### **1.7 Scope and Limitations**

Aim of the study was to determine the effectiveness of psychological interventions in mitigating occupational stress. Effectiveness was measured by comparing results before test and after test on the Psychological Stress Scale (PSS) after administering the intervention. The interventions selected for this study was psychoeducation. Occupational stress was measured using a psychological tool (PSS) that rates the levels of stress among different populations.

The study was carried out on a population of nurses specifically working in national hospitals which may have limited the generalization to these nurses only and exclude others working in other government hospitals of lower category as well as those working in private hospitals. To overcome this limitation, the researcher used an instrument that would apply to broad populations to capture the perception and experience of occupational stress.

Participants may have failed to avail themselves for the entire sessions of the intervention period and this could have affected the post-test results. To overcome this challenge, the researcher expounded the study purpose to the respondents for them to consistently attend the intervention sessions to the end.

### **1.8 Assumptions of the Study**

The study assumptions were as follows:

1. Nurses in national hospitals in Nairobi City County Kenya, experience occupational stress.
2. Group therapy and psychoeducation help in mitigating occupational stress among nurses in national hospitals in Nairobi City County, Kenya.
3. There were interventions to mitigate occupational stress among nurses in national hospitals in Nairobi City County, Kenya

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This part includes analysis of related literature on the effectiveness of psychological interventions in mitigating occupational stress among nurses in national hospitals in Nairobi City County, Kenya. It consists of theoretical framework, occupational stress levels among nurses, psychoeducation intervention occupational stress, literature summary and conceptual framework.

#### **2.2 Theoretical Framework**

Cognitive Behavior Therapy (CBT) was used to guide this in establishing effects of psychological interventions in reducing occupational stress among nurses.

##### **2.2.1 Cognitive Behavioral Therapy (CBT)**

Aaron Beck in the 1960s founded cognitive behavioral therapy. The theory links thoughts to emotions/feelings and behavior. According to Corey (2011) Beck established the concept describing emotion-filled thoughts in human mind after discovering how thoughts, feelings and emotions are important. If a person feels upset, for example, the thoughts tend to be negative, and they are neither realistic nor helpful. Identifying them therefore is the only way of overcoming one's difficulties.

Behavior has been found to be a product of thoughts as Beck noted and so the theory employs behavioral techniques in treatment. Balancing thoughts and behavior therefore are important because individuals can deal with their personal issues as well as interpersonal issues. Due to this observation, a chain of causation has been identified as underlying all Cognitive behavioral theories, the ABC. The “A” represents activating event, “B” represents belief, and “C” represents consequence; therefore, events affect one’s beliefs and the beliefs affect their emotions.

CBT holds that there are two types of disturbance, and these include the holding of irrational beliefs concerning self and the emotional or physical discomfort. The two make a person to think irrationally about themselves as well as about their circumstances. However, one of these disturbances will always dominate.

Core beliefs have therefore been found to have influence on one’s inferences and evaluations. The core beliefs are either assumptions or rules. The assumptions are beliefs on how the world really is while rules are prescriptive. The assumptions render the person to inaction because nothing can be changed while the rules prescribe what a person should do to achieve their end after an event triggers their reaction (Froggatt, 2009).

Having understood the sources of distorted thinking, a therapist is expected to help such people to change their behavior. As such, a client is helped in several ways. First, they must understand that beliefs and thinking cause emotions; secondly, it must be made known to them how the relevant beliefs can be uncovered; thirdly, the clients are taught how to dispute and change their irrational beliefs; and finally, how to get into action.

The underlying factor in all these is the fact that clients are taught about their behavior to gain insight and decide (Corey & Corey, 2011; Froggatt, 2009).

The theory has been criticized for downplaying the influence of other factors like genetics and personality on behaviors (Corey & Corey, 2011). However, this theory is relevant because it explains the link between thoughts and feelings as well as the behavior. It also involves education of clients' thoughts to effect change on how they react to stimuli both internally and externally. Group therapy and psychoeducation majorly involve aspects of CBT which involves stress appraisal and disputation of irrational thoughts that may compound stress. Both group therapy and psychoeducation are based on CBT just as occupational stress which is also based on thoughts and feelings regarding aspects of work.

## **2.3 Review of Related Literature**

Literature was reviewed according to the study objectives in this section.

### **2.3.1 Level of Occupational Stress among Nurses**

Occupational stress is a progressive pressure experienced by workers because of job responsibilities, expectations, environment, demands, conditions, and other work stress. Occupational stress stems from issues like, long hours, heavy workload, job insecurity, lack of autonomy, changes within the organization, tight deadlines, changes of duties and boring work. Occupational stress may occur in form of low mood, being accident prone, regular absence, insomnia leading to tiredness, and a higher sickness rate, consuming too much caffeine or alcohol, low productivity accompanied by feelings of

low achievements and irritability or outbursts of anger. When nurses manifest above symptoms, it is an indication that they are experiencing some levels of occupational stress.

Globally, nursing profession has been termed as one of the challenging professions. Studies have shown that nurses are faced with heavy workload, inconsistent working hours, lack of enough rest at work and other job demands disposing them to occupational stress. All these demands pose significant levels of stress as explicated in several studies. A study conducted by Justine et al. (2015) in private hospital in Singapore indicated that more than half of the nurses (55%) experienced some form of work -related stress compared to those who did not. In support of these, Sharma et al. (2014) reported 42% of nurses experienced moderate-to-severe levels of stress. There was a great relationship between levels of stress and work department. These studies are informative because they point out to the level of stress together with the relationships between areas of work and level of stress.

Another study in Ghana was carried out among nurses by Adzakpah, Laar and Fiadjoe (2016) to determine the prevalence of stress among them with a sampled size of 73. The findings showed that the nurses experienced an individual aggregate score of 37.01 and individual mean of 2.47 which was 10% higher than that required by Weimen Occupational Stress Scale (WOSS) average of 33.75 and individual mean of 2.25. The study findings show nurses experience increased levels of stress compared to the average. Butler, Carello and Maguin (2017) supported these by stating that nurses experience occupational stress due to exposure to traumatic events at work. Findings also reported that clinical environment can be stressful and stir up stress in some nurses.

Given that exposure to traumatic events is a daily occurrence to nurses particularly who in critical units, the study proposed formulation of occupational stress strategies.

A study conducted by Faremi, et al. (2019) to assess the frequency of stressful events among nursing staff and their levels of stress as perceived. The findings indicated that the causes of stress included large workload, performing painful procedures on patients, and lack of equipment and drugs with scores of 2.55, 2.30 and 2.30 respectively on the Nurses' Stress Scale (NSS). Workload was found to be the most stressful followed by inadequate drugs and equipment and death of patients with scores of 3.72, 3.45 and 3.43, respectively. These levels of stress were not significantly different in the two hospitals and for junior and senior nurses. This study is useful because it shows that nurses in different hospitals may have similar levels of stress. However, the current study focused on evaluating prevalence of stress and if the current psychological interventions help to mitigate them among the nurses.

Tsegaw et al. (2022), conducted a study among nurses working at private and public hospitals in Dessie City of Ethiopia to establish determinants of occupational stress using comparative-cross-sectional. The study sample was 304 nurses through simple random sampling, from self-administered questionnaires were used to gather data and analyzed using descriptive, bivariate and multivariate regression. The results showed an average stress of 48.4% among the nurses, 51.6% of them from public hospitals and 46.4% from private hospitals. Being unmarried, working in the operation room and in a private hospital, having a degree and working within the intensive care units were found to predict stress among nurses. The study shows that nearly half of the nurses

(48.4%) were stressed although this study targeted nurses from both private and public sectors to determine their stress.

There is limited literature on the effectiveness of occupational stress among nurses in Kenya. In a Kenyan study carried out by Kokonya et al. (2014) to assess prevalence rate and associated burnout symptoms among medics in Kenyatta national hospital. The findings among others showed that 95.4% of nurses had burnout syndrome which was highly patient relatives, attributed to work environment and self-factors. Burnout comes because of accumulated stress and this shows that majority of nurses suffered job stress. Nevertheless, its more significant to undertake the current research which focuses particularly on the levels of occupational stress and compare the findings where necessary.

A study carried out by Mahiri and Orwa (2016) indicated that workers experienced occupational stress which negatively affected their performance. Chepkwony (2016) reported occupational stress among nurses mostly emanated from relationship with colleagues, families and their patients. Consequently, they proposed the establishment of social and psychological interventions. As such, the study did not identify the effectiveness of the interventions and which ones.

Afulani et al. (2021) in their study examined the degree of burnout and stress among maternity workers including nurses and midwives (62), clinical officers and doctors (16), and 23 support staff who were conveniently sampled in hospital in Western Kenya. The stress measures involved physiologic measures of heart-rate variability and perceived stress. The findings showed that 85% of the participants had moderate stress and 11.5% had high stress and 19.6% with high burnout. This study shows that the

maternity workers were moderately stressed although that is a small portion of health care providers which may not be generalized to nurses only. This similarity may be explained by the kind of work that nurses handle which is physically and emotionally draining, and patient care may not differ greatly in many parts of the world.

### **2.3.2 Effectiveness of Psychoeducation in Mitigating Occupational Stress among Nurses**

Psychoeducation is the process of educating patients and their families to enable them handle mental health issues. Psychoeducation programs are administered to a large group of people experiencing common issues. Mental health issues include occupational stress, depression, anxiety, and burnout while terminal illness include cancer, diabetes, and hypertension just to mention a few Psychoeducation is given to help clients manage or accept their conditions. It informs of educative programs like training sessions, discourse sessions and reflection assignments coordinated by a counsellor. Psychoeducation was found to be effective in managing mental health problems as reported by Jordans, Tol and Ndayisaba (2013).

In a Longitudinal study, Huber et al. (2022) evaluated the effectiveness a multicomponent training program for employees aged 50 years and above in North Rhine-Westphalia in Germany. The training focused on competence, stress management, mental, metacognitive and psychometric training. The study sampled 446 participants –199 in the control group and 247 in the intervention group who were selected conveniently and distributed randomly to the groups. The findings showed significant improvements on wellbeing of the workers. The study tested training which

may be equated to psychoeducation but stress management was not the only component as in the current study, and improvements may have been due to any of the multiple components of the training.

A quantitative quasi-experimental study conducted in Iran by Azad, Hassanvand and Eskandari (2022) to investigate effectiveness of psychoeducation on stress management of workers. The study sampled 30 participants through purposive sampling where exclusion and inclusion criteria were used. The findings showed job stress training to be 67.5% effective in managing job-related stress among the workers in NEDSA. This study did not focus on nurses but employees in a company which was contextually different.

Aghmohammadi et al. (2022) carried a study among midwives in Iran to determine effectiveness of stress management plan on perceived stress in general hospitals in Iran. The study utilized census sampling method to select 121 participants who were screened using the perceived stress scale to get 42 participants who were grouped into two (21 participants each). The findings showed a significant effect of the Kabat-Zinn's MBSR program on perceived stress ( $p = .001$ ) and emotional regulation ( $p = .001$ ). After a three-month follow-up, the program was found to be effective on emotional regulation ( $p = .003$ ) but not on perceived stress ( $p = .125$ ). The study focused on mindfulness which is a cognitive method of stress management but mindfulness is different from group therapy or psychoeducation making it different from the current study.

In an Italian study, Cipoletta, Simanato and Faccio (2019), assessed effectiveness of psychoeducational programs for women diagnosed with cancer and their caregivers. The study sampled 28 women diagnosed with breast cancer and 21 caregivers in a

cancer care hospital in northern Italy. Data was obtained using cognitive behavioural assessment for Outcome Evaluation (CBA-OE) which considers subjective experiences. The findings showed significant changes which could be attributed to the psychological intervention thus proving the effectiveness of the intervention. This study made use of an Italian population of cancer patients and caregivers which differs from the current study focusing nurses thus limiting its generalizability.

Joas, Backman, Karanti and Sparding (2020) indicated that, training sessions administered to bipolar patients were effective in reducing manic episodes. The findings reported reduction in recurrent risk of bipolar after training programs. The reduction of the recurrent risk after training sessions were in ratio of (C1 0.42-0.78,95%,0.57%), depressive episodes (C1 0.47-0.86,0.63,95%) and manic or mixed episodes (C1 0.39-0.76,95%,0.54) subjective to periods before training programs. The findings also indicated that training programs on bipolar decreases risk of mood incident when applied in a regular clinical routine. Despite the study showing training programs as effective in addressing mental health problems, occupational stress among nurses is reported to be on increase.

A cluster randomized study by Jordans et al. (2021) applied group counselling therapy to determine its effectiveness on mental training at disaster-prone setting. The study assessed the participants at the baseline and at the end line (after 20 weeks). The study sampled 611 participants where 324 participants were assigned in the control group and 319 in the for professional mental health training. Results were obtained at the midline and at the endline. The findings showed over 50% reduction in depression symptoms on the intervention group compared to the 17.3% reduction in the control group. This

study focused on brief group psychological treatment and group therapy *per se*, thus the need for the current study.

Sahranavard et al. (2019) assessed the effectiveness of group therapy among medical students with stress, hardiness, anxiety and self-efficacy in Birjand University of Medical Sciences in Iran. The study was experimental in nature and it sampled 30 participants for both experimental and control groups and they were selected randomly. The study was conducted for a period of 6 sessions on the experimental group. The findings showed a general drop in the levels of anxiety and an increase in the average hardiness and self-efficacy scores during the post-test. There was need to focus on the effectiveness of group therapy on a Kenyan population to compare if similar findings do exist.

Esposito, Ribeiro and Alves (2017) reported that sharing forum were effective in improving performance of group members. Group discussions were found to be effective when the researcher use sharing forum to improve academic performance of economic students at university in Italia. The effectiveness of these sharing forums was found to improve on performance of chosen students after undergoing several sessions. Sharing forums are coordinated by counselor to have a meaningful discussion session. Group sharing forums help members to overcome challenges since each member shares their own experiences towards a common challenge. The current study did not focus on sharing forums or group discussions but group therapy intervention, and on a population of nurses rather than students.

In Iran, Dami et al. (2019) using spiritual approach investigated the effectiveness of group counselling in the management of depression, anxiety, stress and spiritual

intelligence using a quasi-experimental design. The study conveniently and randomly sampled 64 participants (32-control group, 32 experimental group) who were administered with anxiety, and stress scale (DASS-21 & DASS-42), the Kings intelligence inventory (SISRI-24). The findings showed a reduction in the levels of negative emotions, depression and stress. There was also an improvement in the spiritual intelligence of the students. This study, while being informative, concerned itself with group counselling for students and it was spiritual-based.

In an experimental study, Sulaiman et al. (2017) conducted a study to assess effectiveness of group therapy in reducing stress among nurses in Kota Kinabalu in Malaysia. The study targeted 170 nurses from whom 36 were selected for the study where three groups consisting of 12 participants were placed in the control, cognitive therapy and behavioral therapy groups respectively. Analysis of the data showed significant reduction in stress levels for the cognitive therapy group counselling ( $z=-3.06$ ,  $p<.0002$ ,  $r=0.89$ ) and behavioral therapy group counselling ( $z= -3.07$ ,  $p<.0002$ ,  $r=-0.89$ ) but no significant changes were found in the control group ( $z=-1.00$ ,  $p<.317$ ,  $r=-0.29$ ). This study shows that provision of both cognitive therapy and behavioral therapy group counselling to be effective in reduction of stress symptoms but the current study only compared psychoeducation and group counselling.

In a randomized controlled trial, Wild et al. (2020) assessed effectiveness of group therapy and psychoeducation among emergency responders in England. The study sampled 430 participants where 317 were placed in the group therapy and 113 in the psychoeducation group. The groups were taken through the intervention for six weeks after which they were assessed again. The test assessed for wellbeing, social capital,

resilience, problem solving, self-efficacy, mental health management confidence and off days due to illness. The findings indicated no great change between the interventions and the post intervention follow up. This study focused on strengthening resilience through psychoeducation as opposed to the current study which measures group therapy and its effectiveness and management of occupational stress.

Counseling groups have been formed to enable interaction of members with common problems. Through counseling interactions members meet and learn from each other how to solve their own issues (Chen and Rybak, 2017). Group counseling interactions are applied in mitigating occupational stress among different populations. This was well manifested in a study conducted by Ohue, Moriyama and Nakaysa (2015) to test group therapy effect on intention to resign and burnout among nurses. The findings showed that cognitive behavioral therapy was effectively applied to minimize the intention to resign and burnout among nurses. There was need to compare such findings with those of the current study due to the contextual differences.

Group counseling bring together people with common issues to discuss possible solutions. Group discussions enable members to face problems with ease because of the support from other members. Bryant et al. (2017) supported this by reporting group counseling was effective in reducing psychological distress among women with experience of gender-based violence within urban centers in the U.S. The current study focused on nurse participants and how group therapy may help mitigate their occupational stress posing a contextual difference.

A study in Saudi Arabia undertaken by Alenezi (2017) among mental health nurses to find out the effectiveness of intervention program on burnout prevention. The study

utilized a training program modeled on CBT to educate nurses on the effect of burnout and burnout management techniques where they were screened after two days. The findings showed significant reduction of burnout among the nursing population. While the study gave relevant results to the current one, it focused on the use of psychoeducation to reduce burnout as compared to the current study which tests the interventions among nurses for occupational stress.

Researchers have tested the effectiveness of discourse sessions in reducing stress among different populations. Shariatkhah, Farajzadeh and Khazae (2017) took a study among nurses to manage their job stress using discourse sessions. The findings indicated substantial reduction of stress in the experimental group unlike in the control group. Discourse sessions allows participants to get and share information on ways to manage their conditions. Shariatkhah, Farajzadeh and Khazae (2017), although reported discourse sessions to be effective in reducing stress, it puts into question why studies continue to report high levels of occupational stress among nurses. This calls for a study to evaluate effectiveness of psychoeducation in mitigating occupational stress among nurses and in a Kenyan population.

Exploration of thoughts in group counseling were also effective in reducing occupational stress among nurses as indicated by Kaboli et al. (2017). Kaboli et al. (2017) applied group counseling using CBT to assess the effect of group counseling on anxiety and specific stress. The study findings found that group counseling reduced specific stress among expectant women although this population was made of expectant women. In addition, Ezegbe et al. (2019), reported group counseling was effective in reducing effect of distress among people with depression and anxiety in Nigeria. The

study findings were informative to this study in investigating effectiveness of group counseling among nurses. The dependent variables for these studies were anxiety, specific stress and depression, unlike the current study that focused on occupational stress as its dependent variable.

In Kenya, Kihara and Mugambi (2018) established the effectiveness of stress interventions on worker's performance in public service. The findings showed a significant positive relationship between employees' performance and the group counseling discussions. Although the study used CBT to test group therapy among different populations did not focus on effectiveness of group counseling as an intervention in mitigating occupational stress among nurses in National Hospitals in Kenya.

Reflection sessions are another aspect of psychoeducation which is used to mitigate occupational stress among nurses. These sessions may be in form of assignments or self-reports intended at identifying hidden strengths of an individual. Through such sessions, members can realize different ways in resolving a particular mental health problem facing them. This was supported by Mutiso, et al. (2017), among institutional adolescents to assess the effect of psycho-education life skills on behavioral and emotional issues in Kenya. The findings reported significant decrease in results of internalizing and externalizing in both interventions. The study used a population of children compared to the current study which will use a population of nurses.

Another Kenyan study by Muriungi and Ndeti (2015) investigated the effectiveness of psychoeducation on student's distress among Kenya Medical Training Institute (KMTC). The findings showed no significant reduction of symptoms in both the

experimental and control group in the first three months. Nevertheless, distress symptoms subsided after six months thus proving the effectiveness of psychoeducation. While the study focused on psychological distress, the current study focused on occupational stress among nurses rather than KMTC students who may be taking medical studies.

## **2.4 Literature Summary**

The reviewed literature has indicated significant levels of occupational stress among nurses. These studies mostly were carried out in a different contexts and environment with current study. This called for a study to investigate current levels of occupational stress among nurses in national hospitals. It is evident from the literature review that; psychoeducation effectively reduces occupational stress. Levels of occupational stress among nurses working in national hospitals was reported to be on the rise regardless of psychoeducation interventions.

Studies have also investigated the effectiveness of group therapy in mitigating occupational stress among nurses. Most studies have shown the effectiveness of the intervention with some focusing on brief group intervention, others on sharing forums and still others on spiritual intelligence. Local studies, though limited indicate that group counselling affects psychological distress although literature is generally minimal.

The effectiveness of psychoeducation was demonstrated by different studies. However, some studies it is only implied because it is equated to training, stress management plans and discourse sessions and life skills training. Also, contextual differences exist

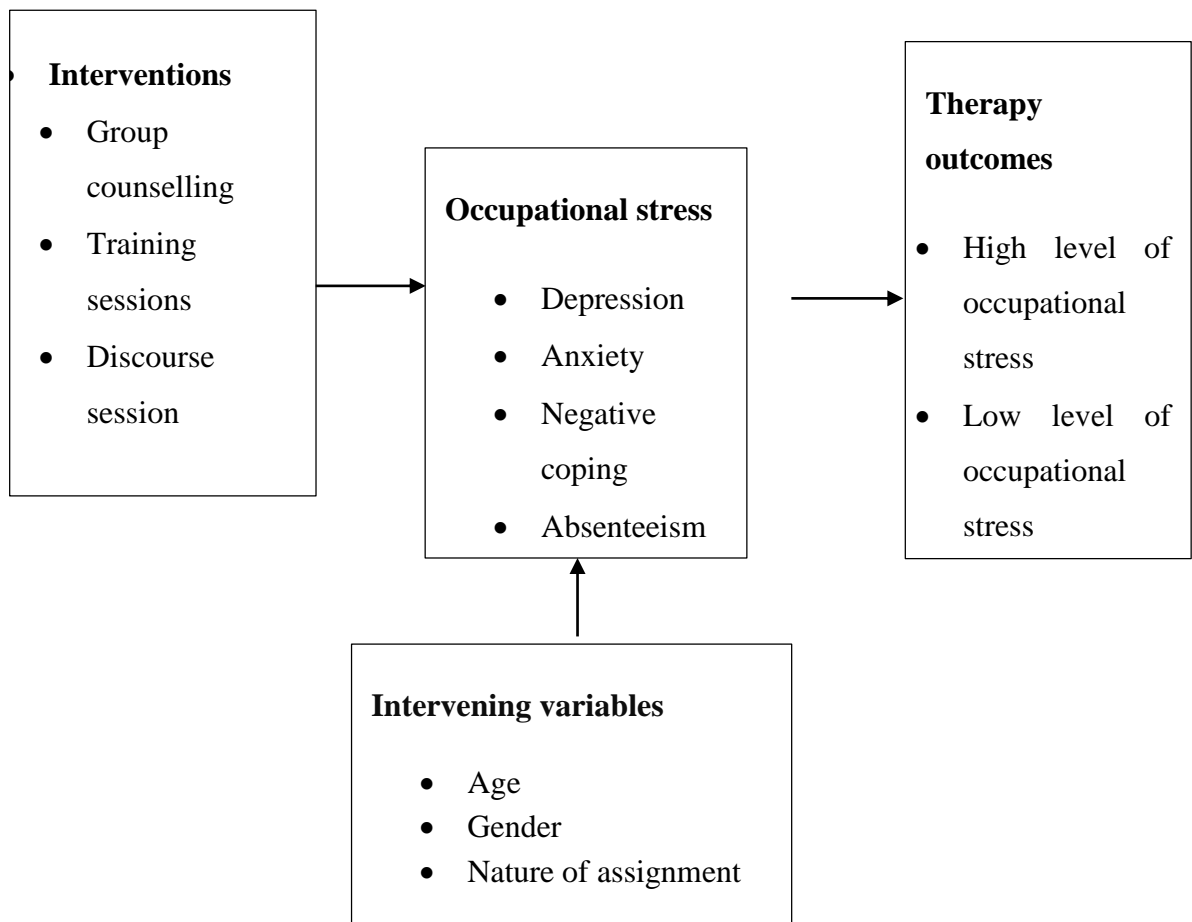
since some of the reviewed literature is based on diverse populations like bipolar patients, midwives, adolescents and employees. There was therefore a need to precisely carry out this study expressly on a nurse population to determine the effectiveness of psychoeducation and group therapy.

## **2.5 Conceptual Framework**

From the conceptual framework presented in figure 2.1 shows the connection between variables which include group psychoeducation as the independent variables and occupational stress as the dependent variable. Administration of the interventions is expected to reduce the effect of occupational stress which was indicated by depression, anxiety, coping, absenteeism, and social dysfunction. If the group therapy and psychoeducation was effective, then low levels of occupational stress were noted and if was not effective, then high levels of occupational stress were evident.

**Independent Variable**

**Dependent Variable**



**Figure 2.1: Conceptual Framework on the effectiveness of group therapy and psychoeducation in mitigating occupational stress among nurses.**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This section comprises of research design, study variables, study site, sample size, sampling technique, the target population, the study tools, the data collection procedures, pilot study, ethical procedures, and data analysis techniques.

#### **3.2 Research Design**

This study applied a quasi-experimental research design to establish the effect of psychological interventions on occupational stress. The researcher preferred a quasi-experimental research design because it shows the causal relations between variables. Accordingly, it will show how group therapy and psychoeducation affect occupational stress among nurses in national referral hospitals in Kenya.

#### **3.3 Study Variables**

Group counseling and psychoeducation were the independent variables while occupational stress was the dependent variable. The independent variable was measured using process group counseling, training sessions, discourse session, while those for dependent variables were physiological, psychological, social and behavioral issues.

### 3.4 Site of the Study

The study was conducted in national hospitals located in Nairobi City County, Kenya. According to the Ministry of Health (2020) there are seven national hospitals in Kenya, three of which are located in Nairobi County which is the capital of Kenya. The researcher therefore chose this county because of the number of national referral hospitals located within it.

### 3.5 Target Population

The study Targeted all nurses working in the two national hospitals with a total of 1178. The hospitals included Kenyatta National Hospital and Mathari Teaching and Referral Hospital. There were 1008 and 302 nurses in the selected hospitals respectively which accounts for the total 1178 nurses. The distribution of the nurses in the different hospitals is shown in table 3.1. The population was selected because was directly involved in the provision of services to the public and were likely to experience various symptoms of occupational stress.

**Table 3.1 Target Population**

<b>Hospital</b>	<b>Total No. of Nurses</b>	<b>Percentage</b>
Kenyatta National Hospital	1008	76.9%
Mathari Teaching and Referral	302	23.1%
Total	1310	100%

Source: Nairobi City County Health Sector Strategic and Investment Plan (2017)

### **3.6 Sampling Techniques and Sample Size**

This section details the sampling methods applied in the current study and the sample size selected for the study.

#### **3.6.1 Sampling Techniques**

The study used both purposive and simple random sampling to select participants for the study. Purposive sampling was used to select two hospitals, that is, Kenyatta National Teaching and Referral Hospital and Mathari National Teaching and Referral Hospital. Purposive sampling was preferred because it allowed the researcher to use their own judgment in choosing the hospitals based on the number of nurses working in the hospitals. Simple random sampling was used to select nurse participants by accessing the nurse registers and randomly picking their names. Simple random sampling ensured that the researcher gave participants equal chances of participating in the study.

#### **3.6.2 Sample Size**

A sample of 150 participants was selected to participate in the study and was generated using the Yamane (1969) formula for sample size. This formula was used because it is suitable for population samples below 10,000 participants.

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

Hence: n the sample size, N the population and e the level of precision (0.05)

$$n = \frac{1178}{1+1178(0.05)^2} = 1178/3.945 = 298.605$$

Finite population correction for proportions was used to substantially reduce the sample size for small proportion. This was because provided sample size for small population gave proportionately more information compared to a larger population. The formula was preferred because it slightly reduced sample size for small population (Israel, 1992).

Therefore: sample size  $n_0$  was adjusted using the following formula:  $n = \frac{n_0}{1 + \frac{(n_0-1)}{N}}$

Hence: n the sample size, N the population size and  $n_0$  the calculated sample of infinite population.

$$n = \frac{298.605}{1 + \frac{(298.605-1)}{298.605}} = 298.605/1.9967 = 149.5492 = 150$$

Therefore: the sample size was 150 nurses.

### **3.7 Research Instrument**

This research used a self-constructed questionnaire to collect data on the effectiveness of psychoeducation intervention, and a standardized tool to measure occupational stress.

The Occupational Stress Indicator (OSI) created by Cooper, Sirigatti, Williams, Sloan, and Stefanile (1988) was adopted for measuring occupational stress. The tool was preferred because it effectively measured occupational stress among workers across the

globe and is a Likert-type scale. The scale items are tailored to measure unpredictability, uncontrollability, and overload of respondents' daily lives. It also had other items that query the present level of experienced stress. The instrument items were easily understood, and the response choices could be simply grasped. The questions were also general and did not center on specific content to a specific sub-group. Finally, it asked questions for respondents to indicate their thoughts and feelings in a period of one month. Items 4, 5, 7, and 8 were reverse scored.

### **3.8 Validity and Reliability**

This section discusses the validity and reliability of the research instruments.

#### **3.8.1 Validity**

Validity and reliability denoted forms of measurement in survey, questionnaires, and even other types of measurement. The study made use of face, content and construct validities. The face validity was found to be remarkable through expert opinion. The researcher constructed the study instruments that were informed by extensive literature review to ensure content validity and made sure the items were in line with the study topic and objectives to ensure construct validity. The KMO coefficient and Bartlett's tests yielded 0.82 and 0.327 respectively showing statistical significance ( $p < 0.0001$ ) representing the sample quality. Furthermore, factor analysis yielded 0.72 on Cronbach's Alpha which was acceptable. The coefficient of stability was found to be 0.93 which was excellent and in line with Lee (2012).

### **3.8.2 Reliability**

In terms of reliability, the researcher conducted a test-retest of the instrument by administering it twice, and thereafter correlation between the two scores estimated. The coefficient of stability of the item correlations between the first and second tests was calculated to find out reliability of research tools as offered by Lewis-Beck, Bryman, and Liao (2004). Study coefficient was 0.9 and was acceptable because it was above 0.7 and items which reached such a threshold were retained.

### **3.9 Pilot Study**

A pilot study was undertaken on a small population of 15 nurses selected from Mukuru health center within Nairobi City County using simple random sampling technique. The researcher retested the same tool after two weeks and found that it was reliable and valid. The participants involved in the pilot study were not part of the respondents of the actual research. The researcher tested the correlation between the scores of the first test with those of the second to obtain the coefficient of stability all the tools. The coefficient of stability for effectiveness of psychoeducation questionnaire was 0.812, and 0.843 for the OSI which were considered to be above the required threshold of 0.7 which considered acceptable.

### **3.10 Data Collection Procedures**

In order to collect data, the researcher obtained permission letters from relevant authorities and institutions in order to be allowed to proceed with the research. Two research assistants were then recruited for the research exercise familiarized with the

purpose of the study and the questionnaire. The researcher also familiarized the two assistants on use of google form and zoom meeting which were used to collect data from the participants. The researcher explained the purpose of the research to the participants and then sought their consent. In the process of contracting, the researcher explained the importance of the study and the harms involved. The researcher then encouraged them to participate and informed them that the study findings may help in establishing possible measures that would be employed in the nursing profession to mitigate occupational stress especially in national hospitals.

The study was conducted in two phases. Phase one included screening (pre-test) of the participants for occupational stress. Those who qualified for the selection criteria were then recruited to participate in the study. The researcher randomly selected the participants for psychoeducation. Phase two lasted for eight weeks. During the second week, the researcher formed groups and made the guidelines and rules for the treatment session. From the second week to the eighth week the group used to meet once per week and go through various stress management techniques. In these weeks, the groups processed the cognitive, emotional, behavioral, and social effects of stress as well as coping strategies. In the eighth session, the group was assessed using the OSI (post-test) to determine the stress levels at the end of the group intervention.

### **3.11 Data Analysis**

The researcher coded the collected data and entered it into the Statistical Package for Social Sciences (SPSS) version 26 to analyze the effectiveness of psychoeducation in mitigating occupational stress among nurses. The researcher made use of descriptive

statistics of mean and standard deviation. Furthermore, a paired t-test was used to determine the effectiveness of the selected interventions. The descriptive statistics had been preferred because of their capacity to summarize data while the paired t-test were used because it determines whether there are any significant differences between the scores of the pre-test and the post-test assessments. Qualitative data was coded into themes which were grouped together and presented in numerical form.

### **3.12 Ethical Considerations**

Ethical considerations refer to ethical standards and concerns which the researcher required to observe in all the stages of the study plan. The informed consent from participants was sort after the researcher obtained research authorization from Kenyatta University and National Commission for science Technology and Innovation. After obtaining consent, the researcher explained the purpose and benefit of the study to the participants. The researcher also observed justice, beneficence and respect for human dignity. Sensitive questions were examined with a lot of care and sensitivity to the feelings and emotions of the participants to avoid harming or causing adverse emotional effects. The respondents were further informed that the purpose of the study was purely academic.

Full disclosure, unbiased treatment and discretion were also observed. All participants gave their responses freely, anonymously and confidentially. The questionnaire lacked any identifier such as names or personal details which lead respondents to any data. The researcher used numbers and codes ensuring no participant access collected data.

## **CHAPTER FOUR**

### **PRESENTATION, ANALYSIS AND DISCUSSIONS OF THE FINDINGS**

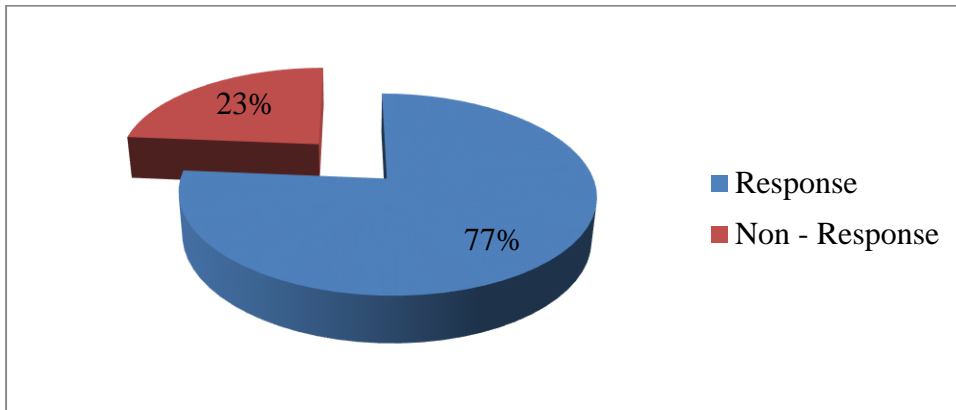
#### **4.1 Introduction**

Chapter four presents the analysis and discussions of the study results from the collected data according to in line with study objectives. The results are based on the descriptive analysis as well as the inferential analysis techniques used to indicate the extent and the relationships between the study variables. The chapter consist of an overview of demographic factors and presentation of analysis and discussions of specific findings in line with study objectives. The discussion is reliant on the best suitable method which gives the researcher best understanding of the results.

#### **4.2 Response Rate and Demographic Characteristics of Respondents**

##### **4.2.1 Response Rate**

Figure 4.1 gives the response rate based on the results given by the respondents. This shows the level of achievement attained by the researcher in his efforts to collect information from the targeted sample size.



**Figure 4.1: Response Rate**

According to findings in figure 4.1, 77% of the targeted sample of the nurses were able to give reliable and valid response to the study item. Thus, 23% of the targeted nurses in the sample did not give response to the study item. The researcher therefore achieved 77% of the sample size in the study which was a good response rate as suggested by Mugenda and Mugenda (2003) that a response rate above 70% is good and can be relied upon to give results of the study.

### **4.3 Study Findings**

The study findings were presented in terms of demographic characteristics of respondents and the study objectives.

#### **4.3.1 Demographic Characteristics**

The researcher sought to establish the demographic characteristics of the study respondents that included the following: gender of the respondents, their ages, marital status, level of education attained and their level of experience in the field. The results of demographics are presented in table 4.1.

**Table 4.1 Demographic Characteristics of Respondents**

<b>Characteristic</b>		<b>Frequency</b>	<b>Percentage</b>
Gender	Male	43	37.0
	Female	72	63.0
Age (Years)	31 – 40	57	50.0
	41 – 50	34	30.0
	51 – 60	19	16.0
	61 and above	5	3.0
Marital Status	Single	35	30.0
	Married	71	62.0
	Separated	6	5.0
	Divorced	3	3.0
Education Level	Masters	0	0.0
	Bachelors	9	8.0
	Diploma	93	81.0
	Certificate	13	11.0
Experience	0 – 5	7	6.0
	6 – 10	27	23.0
	11 – 15	72	63.0
	16 and above	9	8.0
	<b>Total</b>	<b>115</b>	<b>100.00</b>

Table 4.1 gives the respondents' demographic and social economic characteristics. From the table, majority (63%) of the respondents were female while over a third (37%) were male. The table also shows that half (50%) of the nurses who participated in the study aged between 31-40 years. Those aged above 60 years were the least at 4% of the respondents.

Among the respondents, about two thirds (62%) were married whereas about a third (30%) were single and 3% had separated with their spouses. On the respondents' level of education achieved, over three quarters (81%) were diploma holders of the nurses who participated in the study. Those with bachelor's degree were 8% and 11% were certificate holders. In addition, nearly two thirds (63%) of the respondents had a working experience of 11 to 15 years, 23% had 6 to 10 years of experience whereas those with above 15 years of experience were 8%. The least were those who had worked

for less than 5 years accounting for 6% of the participants. From the results above, demographic findings were significant in the study because nurses were represented from all categories thus making the study findings generalizable to the general population of nurses working in national hospitals.

#### 4.3.2 Levels of Occupational Stress among Nurses in National Hospitals

The first study objective aimed at establishing the levels of occupational stress among nurses in national hospitals. This is used as a scale to measure the extent of stress among nurses offering the services at the selected national health facilities in Kenya. This sought to capture the nurses' feelings and thoughts during a period of 30 days before the study period. The findings are presented in Table 4.2 below.

**Table 4.2 Occupational Stress Indicator (OSI)**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Occupational Stress	115	20	100	53.45	6.8655
Valid N (listwise)	115				

From table 4.2, majority of the nurses scored an average level of stress ( $M= 53.45$ ,  $SD= 6.8655$ ). The minimum possible score was 20 and the highest possible score was 100. The researcher subdivided the scores into three levels of low, moderate, high. A score of 20-45 meant low level of occupation stress, that of 46-71 meant moderate level of stress and 72-100. The current score means the nurses scored a moderate score of occupational stress which meant they experienced stress sometimes. This could have

been occasioned by emergency responses, a surge in the number of patients, some work demands among others, and so they could not point to any consistent occupational stressors in their work.

These findings on the levels of occupational stress are closely in agreement with Sharma et al. (2014) who found that nurses in Singapore experienced moderate to severe stress. In the current study however, majority of the participants experienced stress sometimes meaning it may not have been necessarily severe. The findings also resonate with Kshetrimayum et al. (2019) and Onieva-Zafra et al. (2020) who also found that 55.4% and 47.92% of nurses and nursing students in India and USA respectively experienced moderate stress just as Chatzigianni (2018) found nurses in Italy to have moderate stress. This may imply that nurses in Kenya may face similar conditions that trigger them to experience stress in their workplace as reported by Godwin et al. (2016).

The findings, however, differ with the study conducted in US by Jordan et al. (2016) who reported 92% of nurses experienced moderate-to-very high stress. They also contradict Tsegaw et al. (2022) who found 48.4% of nurses in Ethiopia experienced severe stress and Afulani et al. (2020) who found 85% of nurses in Kenya to experienced moderate stress and 11.5% high stress. This difference could be explained by the differences in context and also the coping mechanisms employed by these nurses in their context.

While most studies have indicated that nurses mostly experience moderate to severe stress in their workplace. This study found that stress depends on the weight of different stressors and so nurses in Kenya could only point out to experiencing stress sometimes.

It could thus be deduced that nurse stress experience may depend on prevailing conditions or events rather than having continuous stress.

### 4.3.3 Effectiveness of Psychoeducation in Mitigating Occupational Stress among Nurses

The third objective aimed to determine the effectiveness of psychoeducation in mitigating occupational stress among nurses. Effectiveness was determined using a paired t-test which compared the pretest scores and the posttest scores on occupational stress. The findings for this objective are shown on table 4.3, 4.4 and 4.5.

**Table 4.3 Paired Sample Statistics**

	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
Post-test	53.45	115	6.8655	1.01576
Pre-test	60.312	115	7.237	1.06420

Table 4.3 shows the mean scores of the post and pre-test groups where the mean of the post-test groups. The post test mean was slightly lower ( $M = 53.450$ ,  $SD = 6.8655$ ) compared to the pre-test ( $M=60.312$ ,  $SD = 7.237$ ). The paired samples were also correlated to determine the correlation between the pretest and posttest scores. The findings are shown table 4.4.

**Table 4.4 Paired Samples Correlations**

	<b>N</b>	<b>Correlation</b>	<b>Sig.</b>
Pretest and Post test	115	-.059	.399

Table 4.4 shows that there was a negative correlation that was not statistically significant between the scores of the groups  $r[115] = -.059, p = .399$ ). The researcher also conducted a paired sample t-test whose results are shown in table 4.5.

**Table 4.5 Paired Samples T-Test**

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pretest and Post test	- 8.47805	21.67826	1.51408	- 11.46329	- 5.49281	- 5.599	114	.000

Table 4.5 shows that there were significant differences between the pretest and post-test scores ( $M = 8.478, 95\% \text{ CI } [-11.463, -5.493], t[114] = -5.599, p = 0.05$ ) meaning the intervention was effective. The researcher went to test the null hypothesis using two-tailed curve which was considered suitable and which was as stated as follows:

$H_0$ : There is no significant effect of psycho-education in mitigating occupational stress among nurses in national hospitals in Nairobi City County.

The null hypothesis was thus rejected and the alternative adopted then stated as follows:

$H_A$ : There is a significant effect of psychoeducation in mitigating occupational stress among nurses in national hospitals in Nairobi City County.

The rejection of the null hypothesis indicated that the nurse participants found psychoeducation effective in mitigating stress. This means that group psychoeducation

is a suitable intervention for mitigating occupational stress among nurses. This means that nurses who are taken through psychoeducation groups are likely to experience lower levels of occupational stress. These findings agree with Alenezi (2017) and Mutiso et al. (2017) who found psychoeducation to effectively reduce occupational stress among nurses. While it may not be directly so, Shariatkhah et al. (2017) found significant reduction in occupational stress among nurses as a result of psychoeducation. This implies that nurses who are well psycho-educated are likely to find it easy to apply their skills on managing occupational stress. In another study by Dahl, et al. (2020) which looked at the effectiveness of Psychoeducation interventions of ADHD behavioral and symptoms problems among adolescents and children with ADHD, there is the findings reported psychoeducation to be effective in reducing behavioral and symptoms problems of ADHD.

The study, although, looked at different components, Huber et al. (2022) findings predict well with the current study because there was significant improvement in subjective health, competence at work, self-efficacy, self-concept and stress coping among others. This could mean that interventions relayed in form of training may significantly reduce stress. This is similar to Azad et al. (2022), who reported psychoeducation to be effective job stress management with 67.5% improvement; and Aghmohammadi et al. (2022) who found mindfulness-based stress management to significantly reduce perceived stress, and emotional regulation among midwives in Iran, although there were no long-term effects; Cipoletta et al. (2019) whose findings showed significant changes in stress levels of women with breast cancer; and Joas et al. (2020) who reported bipolar reduced mood incident among patients.

Although these studies involved different interventions, all of them were administered through psychoeducation and the findings seem consistent. This similarity can be explained by the fact that psychoeducation is educative and once delivered to groups it gives room for more reflection and mutual support. It is therefore evident from these findings that psychoeducation interventions of training sessions significantly help nurses deal with work related stressors. Those who found an opportunity to attend discourse sessions on occupational stress management eventually experienced stress relief in their working environment. This study therefore found group psychoeducation which involves training of the participants rather than processing their feelings to be effective in mitigating occupational stress.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This section presents the summary of the main findings of the study, conclusions from the key findings and the recommendations for policy and suggestions for further studies.

#### **5.2 Summary of Key Findings**

This section summarizes the key findings of the study in accordance to the study objectives.

##### **5.2.1 Levels of Occupational Stress among Nurses**

According to the first objective, the researcher aimed at determining the levels of occupational stress among nurses. The findings indicated that nurses stress score was moderate ( $M = 53.45$ ,  $SD = 6.8655$ ). This implied that nurses experienced stress ‘sometimes’ meaning stress was momentary and could have been determined by different events and experiences.

##### **5.2.2 Effectiveness of Psychoeducation in Mitigating Occupational Stress**

Objective two was to measure the effectiveness of group psychoeducation in mitigating occupational stress. There were significant stress differences ( $M = 8.478$ , 95% CI[-11.463, -5.493],  $t[114] = -5.599$ ,  $p = 0.05$ ) between the pre- and -posttest stress scores

in the psychoeducation group. This meant that psychoeducation helped reduce the stress levels among nurses.

### **5.3 Conclusions of the Study**

The research found psychoeducation to be effective in mitigating occupational stress among nurses in Nairobi County. According to the study objectives, the following conclusions were made.

1. In terms of objective one, the study found that majority of nurses experienced moderate levels of stress sometimes. This showed that occupational stress was transient and could be triggered from time to time, which could further imply that different events or experiences elicited different levels of stress.
2. In terms of objective three, psychoeducation was found to significantly reduce the levels of stress among nurses. This means that training on strategies of managing stress helped the participants to minimize the levels of occupational stress. Learning about stress can therefore equip nurses with requisite skills for managing occupational stressors.

### **5.4 Recommendations of the Study**

This part contains recommendations of the study, which include recommendations for policy and suggestions for further studies.

#### **5.4.1 Recommendations for Policy**

The study makes the following recommendations for policy:

1. Nurses experience stress according to different experiences and events. Psychological measures for addressing such situations should be put in place to address the different stressors that threaten their work performance.
2. There may be a need for hospital administrations to know different events or experiences that highly trigger stress among nurses in order to intervene against them.
3. National hospitals and other lower-level hospitals may greatly help the nursing staff by providing psychoeducation services to them.

#### **5.4.2 Suggestions for Further Research**

The research proposes the following suggestions for future study:

- i. This study focused on occupational stress among nurses. Other studies can measure nurse stress related to other areas like personal and family stress.
- ii. This study focused on the general population of nurses, other studies can focus on nurses from different designation areas like the emergency nurses and critical care nurses.
- iii. This study was conducted on national hospitals, other studies can be carried out on lower-level hospitals like level 5 and level 4, or it can be conducted on staff in other organizations.
- iv. This study was quantitative in nature and qualitative studies can also be conducted to explore the individual stressors in detail.

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## APPENDICES

### APPENDIX 1: Introductory Letter

Maithya Peter

P.O BOX 43844-00100,

Nairobi- Kenya

Dear Respondent,

#### **RE: REQUEST FOR RESEARCH DATA**

---

My name is Maithya Peter, a Master of Arts Student from Department of Psychology in Kenyatta University. As required by degree program, I am carrying out research on the effectiveness of selected psychological interventions in mitigating occupational stress among nurses in selected national hospitals in Nairobi County, Kenya. You have been chosen to participate in the study. This is to humbly request you to help me gather the information by completing filling the provided questionnaire.

The information you provide will be exclusively used for academic purposes. My supervisor and I assure you that the information you give will be treated with strict confidentiality. At no time will you or your institution's name appear in my report. A copy of the project will be availed to you upon request.

Your co-operation is appreciated and thanks in advance.

Yours faithfully

Maithya Peter

Instructions

Please answer appropriately in the questions below. Do not write your name in this questionnaire. You may seek clarity for any question which is not clear. Please tick or write where appropriate.

**SECTION A: DEMOGRAPHIC INFORMATION**

This section seeks to collect information about personal information which will be used for academic purposes exclusively. Please tick appropriately.

Your gender

Male ( )                      Female (        )                      others (        ) specify  
.....

Your age bracket.

(    ) 31-40            (    )                      61 and above (    )  
41-50 (    )    51-60 (    )

Marital Status

Single (    )            Married (    )  
Separated (    )            Divorced (    )

Your highest level of education?

Masters ( )    Bachelors ( )    Diploma ( )    Certificate ( )    others ( ) specify.....

How many years have you worked as a nurse?

0-5 years (    )    6-10 years (    )    10-15 years (    )    16 and above (    )

Specialization

.....

## SECTION B: LEVELS OF OCCUPATIONAL STRESS

### Instructions

This section contains questions concerning your thoughts and feelings in last one month. In each question you are humbling requested to mark by ticking how often you thought or felt a certain way in last one month. occupation described by the following statements.

### Scale:

- 1 = Strongly Disagree (SDA)
- 2 = Disagree (DA)
- 3 = Uncertain (U)
- 4 = Agree (A)
- 5 = Strongly Agree (SA)


Please indicate on a scale of 1 to 5; for example, encircle 5 If you Strongly Agree (SA), or encircle 1 if you Strongly Disagree (SD) and so on.

S.#	Statements	SDA	DA	U	A	SA
1.	I have to do a lot of work in this job					
2.	The available information relating to my job-role and its outcomes are vague and insufficient.					
3.	My different Officers often give contradictory instructions regarding my works.					
4.	Sometimes it becomes complied problem for me to make adjustment between political/group pressures and formal rules and instructions.					
5.	The responsibility for the efficiency and productivity of many employees is thrust upon me.					
6.	Most of my suggestions are heeded and implemented here.					

7.	My decisions and instructions concerning distribution of assignments among employees are properly followed.					
8.	I have to work with persons whom I like.					
9.	My assignments are of monotonous nature.					
10	Higher authorities do care for my self-respect					
11	I get less salary in comparison to the quantum of my labor/work.					
12	I do my work under tense circumstances.					
13	Owing to excessive work load I have to manage with insufficient number of employees and resources.					
14	The objectives of my work-role are quite clear and adequately planned.					
15	Officials do not interfere with my jurisdiction and working methods.					
16	I am responsible for the future of a number of employees.					
17	Some of my colleagues and subordinates try to defame and malign me as unsuccessful.					
18	My suggestions regarding the training programs of employees are given due significance.					
19	My co-operation is frequently sort in solving the administrative or industrial problems at higher level.					
20	I have to do some work unwillingly owing to certain group or political pressures.					

*Thank you for your participation.*


**Appendix 2: NACOSTI**



**REPUBLIC OF KENYA**

**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION**


**RefNo: 550450**



**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION**

**Date of Issue: 11/September/2020**

**RESEARCH LICENSE**




**This is to Certify that Mr. Peter Mutiso Muidhya of Kenyatta University, has been licensed to conduct research in Nairobi on the topic: Effectiveness of Psychological Interventions in Mitigating Occupational Stress among Nurses in National Hospitals in Nairobi City County, Kenya for the period ending : 11/September/2021.**

**Applicant Identification Number**


**550450**

**License No: NACOSTIP/20/6561**



**Director General**  
**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION**

**Verification QR Code**



**NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.**

### Appendix 3: Research Authorization Letter

**KENYATTA UNIVERSITY  
GRADUATE SCHOOL**

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 8710901 Ext. 57530

Our Ref: C50/37157/2016

DATE: 13<sup>th</sup> August, 2020

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

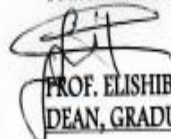
**RE: RESEARCH AUTHORIZATION FOR MAITHYA PETER MUTISO - REG. NO.  
C50/37157/2016**

I write to introduce Mr. Maithya Peter Mutiso who is a Postgraduate Student of this University. He is registered for M.A degree programme in the **Department of Psychology**.

Mr. Maithya intends to conduct research for a M.A Project Proposal entitled, **"Effectiveness of Psychological Interventions in Mitigating Occupational Stress among Nurses in National Hospitals in Nairobi City County, Kenya"**.

Any assistance given will be highly appreciated.

Yours faithfully,

  
**PROF. ELISHIBA KIMANI  
DEAN, GRADUATE SCHOOL**

EK/nn

## Appendix 4: Research Approval Letter from Graduate School



KENYATTA UNIVERSITY  
GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 13<sup>th</sup> August, 2020

TO: Maithya Peter Mutiso  
C/o Psychology Dept.

REF: C50/37157/2016

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

We acknowledge receipt of your revised Project Proposal as per our recommendations raised by the Graduate School Board at its meeting of 26<sup>th</sup> February, 2020, Entitled, "Effectiveness of Psychological Interventions in Mitigating Occupational Stress among Nurses in National Hospitals in Nairobi City County, Kenya".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

A handwritten signature in black ink, appearing to be 'J. Gitu'.

JULIA GITU  
FOR: DEAN, GRADUATE SCHOOL

C.c. Chairman, Department of Psychology

Supervisors:

1. Dr. Eunice Njeri  
C/o Department of Psychology  
Kenyatta University