

**DETERMINANTS OF MORAL DISTRESS AMONG HEALTHCARE  
PROVIDERS WORKING IN ONCOLOGY DEPARTMENT, KENYATTA  
NATIONAL HOSPITAL, NAIROBI CITY COUNTY, KENYA**

**MORINE N. MWENYA**

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**OCTOBER, 2025**

## DECLARATION

### STUDENT

I certify that this thesis is my original work and has not been submitted elsewhere for examination, the award of a degree, or publication. I have endeavored to acknowledge and reference other author' s work have been used in accordance with the Kenyatta University requirements.

Signature\_\_\_\_\_ Date \_\_\_\_\_

**Morine Mwenya**

**R50/39138/2017**

### SUPERVISORS

We confirm that the student carried out the work reported in this thesis under our supervision

Signature\_\_\_\_\_ Date \_\_\_\_\_

**Dr. Grace Githemo, PhD**

Department of Community Health & Reproductive Health Nursing

Kenyatta University

Signature\_\_\_\_\_ Date \_\_\_\_\_

**Dr. Mourice Kodhiambo, M. Pharm, MSc. MA.**

Department of Pharmacy

Kenyatta University

## **DEDICATION**

This thesis is devoted to my wonderful loving mother, Mrs. Marctil Liaka Uluma, my siblings for their encouragement, love, and support.

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**ABBREVIATIONS AND ACRONYMS**

<b>CCU</b>	Critical Care Unit
<b>DNR</b>	Do not Resuscitate
<b>ERC</b>	Ethical Research Committee
<b>HCP</b>	Healthcare providers
<b>KNH</b>	Kenyatta National Hospital
<b>KNH-UON ERC</b>	Kenyatta National Hospital -University of Nairobi Ethical Research Committee.
<b>MD</b>	Moral distress
<b>MDR-S</b>	Moral Distress Scale-Revised
<b>MTRH</b>	Moi Teaching and Referral Hospital

## OPERATION DEFINITIONS OF TERMS

<b>Advanced stage of cancer</b>	Is the cancer disease that has metastasized. thus limiting the treatment.
<b>A flawed</b>	Having imperfections; a dysfunctional
<b>Coping strategy</b>	Is a conscious or unconscious action or a series of actions used to reduce unpleasant or stressful emotions or situation.
<b>Critical Care Unit</b>	Is a separate, self-contained, medical facility with specialized staff and equipment for the care of patients with life-threatening conditions.
<b>Moral Distress Scale-Revised</b>	Is an instrument used to measure moral distress ,which was developed from Corley' s Moral Distress Scale.
<b>Veracity</b>	The quality of being true, honest, or accurate.
<b>Ordeal</b>	Nightmare.
<b>Oncology</b>	The field of medicine that addresses the identification and management of malignant tumors
<b>Ethical</b>	Deals with principles of morality of being right or wrong.
<b>Cancer</b>	

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## ABSTRACT

The increasing popularity of moral distress among the HCPs deployed in Oncology departments in our hospitals is becoming a problem of phenomenal proportions not only among the health care circles but the entire health services consumers in the country and a lot need to be done to stem this development. Indeed Moral distress among healthcare providers has generated a lot of debate in Kenya. Yet minimal studies have been undertaken to study, examine and document the prevalence, interrelationships, effects and what needs to be done. This study therefore discusses the prevalence, causes and interrelationships of the causal factors and the coping mechanisms of the HCPs to moral distress in oncology departments. A cross sectional study was conducted, using a proportionate stratified sampling method to take in the study sample representative and information was composed using a structured self-administered questionnaire comprising of three sections a socio-demographic section, Moral Distress Scale-Revised and a coping strategy items as the section C of the questionnaire. Descriptive analysis was done where frequencies and percentages were used to sum up grouped data while mean and standard deviation was used to summarize continuous data. Chi-square and Fischer's exact test were used to investigate the factors associated with moral distress. Binary logistic regression was used to investigate the determinants of moral distress. Level of significance was investigated at 0.05. Statistical package for social sciences was used for analysis. The findings showed that, 56.6%(n =82) of the respondents were male. In investigating age group of study participants, 40.7%(n =59) were aged between 41 and 50 years. Marital status showed that 59.3%(n =86) of the participants were married. In investigating moral distress, that 37.9% (n =55) had no moral distress, 49%(n =71) had mild moral distress while 13.1%(n =19) had severe moral distress. The findings showed that participants with degree, (AOR =0.33, 95%CI:0.14 – 0.85, p =0.001), higher diploma, (AOR =0.22, 95%CI:0.10 – 0.49, p <001) and those with master's level education, (AOR =0.16, 95%CI:0.04 – 0.51, p =0.010) were less likely to experience moral distress as likened to those with diploma level qualification. Those who had  $\leq 2$  years duration of experience (AOR =2.50, 95%CI:1.91 – 6.41, p =0.005). Those who were neutral on assertion that patients' relatives have unrealistic expectations about them (OR =0.24, 95%CI:0.09 – 0.76, p =0.015), Those who agreed with the statement that patients' relatives have unrealistic expectations about (AOR =3.88, 95%CI:1.05 – 14.35, p =0.042 and those who disagreed with the statement that there is autonomy in decision making (AOR =4.15, 95%CI: 1.16 – 14.81, p =0.028) were determinants of moral distress. The findings have showed that the burden of moral distress is high which warrants the need for healthcare providers to shape focus on their wellbeing. There is need to foster a culture of open communication where healthcare providers feel comfortable discussing moral distress and ethical challenges with colleagues, supervisors, and mentors.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background Information

The challenge posed by moral distress in healthcare institutions worldwide is enormous. Many healthcare providers have fallen victims of this phenomenon, which compromises their service delivery to the extent of many of them deviating from the expected norm and end up losing their sense of direction to become a liability to the institutions without knowing the reasons for their change of behavior.

Moral distress is seen to happen when someone appreciates what is seen as correct ethically, but for reasons perhaps unknown, one is not able to act as expected (Sandeberg, Cecilia & Pernilla, 2016). In addition, Nuttgens and Chang (2013) defined moral distress as the "experience that is encountered when someone feels limited from doing in regard to what one sees as acceptable as ethically correct ".Moral distress also happens when people believe they are incapable of acting according to their beliefs ethically due to categorized or institutional restrictions (Isolina et al.,2018). Therefore, when persons are aware of the correct moral actions but feel incapable of performing it, he/she undergoing moral distress.

Moral distress has provoked a burdensome experience in oncology, and constant ethical problems have been experienced in this area by the healthcare providers. The issues are many and range from failure to seek informed consent for patients before diagnostic and therapeutic approaches to extend life without regarding its quality. There is also the questionable professional practices and utilization of technologies and remedies for

managing patients who are insensitive to accessible treatment modalities due to advanced disease at the time of diagnosis (Austin, Saylor & Finley, 2017).

Several studies have shown a soaring pervasiveness of moral distress among healthcare providers managing cancer victims. A study done at a Germany university hospital reported a high rate of moral distress among the healthcare providers stationed in the oncology department, where 67% of the physicians and 74% of the nurses reported having experienced moral distress (Mehlis et al., 2018). Another study done in Sri Lanka disclosed a pervasiveness of 91.2% of moral distress among healthcare providers working in oncology units. (Amjed, Perera, Amadoru, Kandamby & Chaminda, 2019). This is a very high level, and its more in-depth examination becomes paramount.

Of importance is the factor of the decrease of self-esteem that may result from moral distress among healthcare providers working in oncology units (Rushton, 2016). Insufficient self-assurance might lead to healthcare providers' to hesitate to voice their concerns or discontinuation from conversations altogether. One common institutional factor that may trip moral distress is intra-team conflicts. This decrease of self-esteem and can be attributed to various causes, such as differences in role perceptions, personal moral codes, levels of power, authority, and communication and collaboration (Rushton, 2016).

Moral distress is a circumstance that can occur, whether known or not known to healthcare providers. This phenomenon may appear in many ways as follows : when the healthcare providers detach themselves from the patient; deplete their amplitude to care and accord patients excellent quality services; develop poor communication with other

healthcare providers; and begin to experience suffering from emotive distress and exuding manifestation such as anger and evidence of burnout such as headaches (Wilson, Goettemoeller, Bevan & Jennifer,2013; Borhani, Mohammadi & Roshanzadeh,2015).

In addition, moral distress leads to teamwork erosion, poor patient outcomes, lack of inter-team confidence, emotional withdrawals from the patients, not meeting patients' and families' needs, and decreased job satisfaction (Rushton, 2016). Therefore, this study will enable healthcare providers to identify situations and establish relationships among the many factors and identify strategies that will help them cope with the moral distress on the healthcare providers, patients, and the organization.

## **1.2 Statement of the Problem**

There is a soaring prevalence of moral distress among the HCPs as evidenced by few studies. A study done at a Germany university hospital reported a higher percentage of moral distress among the healthcare providers stationed in the oncology department, where 67% of the physicians and 74% of the nurses reported having experienced moral distress (Mehlis et al.,2018). Another study done in Sri Lanka disclosed a pervasiveness of 91.2% of moral distress among healthcare providers working in oncology units. (Amjed, Perera, Amadoru, Kandamby & Chaminda, 2019).

Moral distress has been found to have undesirable outcomes for both healthcare providers, the patients and institution. It has also been established that moral distress can consequently have direct and indirect effects on healthcare providers' psychological sequel, including causing stress, depression, withdrawal behaviors, and sleep

disturbance. This scenario may result in human resource constraints: absenteeism and turnover (Davidson et al.). Physical disorders for example ordeal, head pains, panic, and a flawed personal life have been reported among healthcare providers (Robaee et al., 2018; Kathleen, 2017).

Consequently, prolonged moral distress can lead to indifference to ethical issues, counter procedural coping strategies, and physical impairment (Compbell et al.,2016). The problems caused by the prevalence of moral distress on healthcare providers' performance in the oncology department, KNH should be studied to address them and thus reduce their impact.

Most studies done in Kenya on moral distress focused on other specialties such as the Critical Care Unit and other areas. Little is known on moral distress in Kenya among healthcare providers working in oncology units. There is scarce information on its prevalence, the relationships, causative factors, and the impacts this prevalence pose on both healthcare providers working in oncology units and the cancer patients and the institution at large. Therefore, the intention of the study is to describe the determinants of moral distress among healthcare providers working in oncology department, the causative factors of moral distress and lastly how the healthcare providers cope with moral distress at KNH.

### **1.3 Research Questions**

1. To what extent do healthcare providers experience moral distress in oncology department at KNH?
2. What healthcare provider factors' that are contributing to moral distress among healthcare providers working in oncology department at KNH?
3. What patient factors are causing moral distress among healthcare providers working in oncology unit at KNH?
4. What are the institution factors that influence moral distress among the healthcare providers working in oncology department at KNH?
5. What are the moral distress coping strategies the healthcare providers working in oncology department at KNH use?

### **1.4 Research Objectives**

#### **1.4.1 Broad Objectives**

This study aimed to describe the determinants of moral distress among healthcare providers working in the oncology department at Kenyatta National Hospital.

#### **1.4.2 Specific objectives**

1. To assess the level of moral distress among healthcare providers working in oncology departments at KNH.
2. To determine the relationship between health care provider individual factors and moral distress among healthcare providers at KNH oncology department.

3. To establish the relationship between patient factors and moral distress among healthcare providers at KNH oncology department.
4. To determine the relationship between institutional factors and moral distress among healthcare providers at KNH oncology department.
5. To establish the moral distress coping strategies among the healthcare providers working at the oncology department at KNH.

### **1.5 Significance of the study**

Studies shows a high prevalence of moral distress among healthcare providers. A study done at a Germany university hospital reported a high rate of moral distress among the healthcare providers stationed in the oncology department, where 67% of the physicians and 74% of the nurses reported having experienced moral distress (Mehlis et al.,2018). Another study done in Sri Lanka disclosed a pervasiveness of 91.2% of moral distress among healthcare providers working in oncology units (Amjed, Perera, Amadoru, Kandamby & Chaminda, 2019) In addition, several studies indicated that HCPs working in oncology departments experienced a high intensity of MD compared to other HCPs working in other departments (Matey,2016, Pernilla, Cecelia, & Klas, 2018).

Several factors have been associated with moral distress as evidenced studies. For instance, increased workload was associated with a higher rate of MD (Sandeberg et al.,2020; Vargas,2019 ; Shereen & Hanan,2017).Consequently, advanced stage of cancer and hesitancy of the HCPs to have an open communication with the patient

concerning their state of the disease progress also caused an upsurge in MD among the HCPs (Salim et al.,2018; Mehlis et al.,2018;Sandeberg e al.,2020 ).

Moral distress has also been linked to undesirable effects for both HCPs , the patients and institution.MD has both direct and indirect effects on HCPs: stress, depression, withdrawal behaviors, and sleep disturbance thus resulting in human resource constraints such as absenteeism and turnover (Davidson et al.).In addition, physical disorders such as nightmares ,headaches panic, and a flawed personal life have been reported among HCPs (Robaee et al., 2018; Kathleen, 2017). Consequently, prolonged moral distress can lead to indifference to ethical issues, counter procedural coping strategies, and physical impairment (Compbell et al.,2016 ). The findings of this study will enable the health care institutions to examine and therefore understand the interrelationships of moral distress among health care workers, patients, and the institution in the oncology department of KNH and establish the extent to which this exists and the coping mechanisms of the HCP to the moral distress. It will also discover the coping mechanisms to moral distress phenomenon on the HCP and their performance at work and at home. Therefore, this information will enhance their performance, especially where they will be working under morally distressing situations.

The findings of the study will benefit the healthcare providers by increasing the avoidance of the negative impacts caused by moral distress on them; it will boost their self-confidence and esteem, strengthen teamwork and communication both vertically and horizontally, and increase job satisfaction to all cadres of oncology department

staff. Due to enhanced self-confidence among staff, it will improve patient care quality, reduce patient suffering, improve the rate of recoveries, shorten hospitalization, and finally benefit the institution by reducing costs and the need for resource allocations, including finances and human power. We envisage an overall reduction in staff turnover. Even the upcoming oncology healthcare providers will benefit from this awareness as the study material's availability will give them the information they need.

Health care institutions will find the findings of this study beneficial. They can use it to arrange program sessions to give awareness on how to identify the various situations and relationships of several players and factors on moral distress, including how to deal with moral distress. The study will greatly enhance oncology healthcare providers' performance by identifying situations contributing to the emergence of moral distress among healthcare providers, its effects on patients and the institution, and the available coping strategies that should be put in place. Also, dealing professionally with the HCP affected by the phenomenon will be readily enhanced.

The findings will be very useful to other healthcare institutions in the country and the region since little remains unknown in them in the country and the region. The study will also become a basis of future references by other interested scholars in this field who will use the information herein to do more research and perhaps better the findings therein. The findings will also strengthen the research information available for future use. The findings of this study will also be useful to the community at large in that the community will be given the best services from the healthcare providers who will be free from moral distress.

## **1.6 Theoretical Framework**

This study will apply the Calista Roy's adaptation model, which was developed in 1981 and it comprise of five main notions of nursing theory. In this model, adaptation is the core concept. Roy views an individual as a comprehensive, flexible system having a continual interaction with the internal and external surrounding (Roy C. 2009).

This model narrates human being as a collection of interrelated biological, psychological, and social structure attempts to uphold a balance between their personal systems and the surrounding. In attaining that, the model describes the existence of an environment that enables them to endure by utilizing natural or acquired ways of making a response to a dynamic surrounding, thereby demonstrating how humans acquire skills that enable them to cope positively and adapt to new changing situations

This model will play a significant role by enabling healthcare providers to be aware of the factors that are contributing to moral distress in their work environment (stimuli). In addition, this adaptation model will aid in recognizing the physical, mental and emotional effects caused by moral distress on their health and adopt resiliency strategies that will aid them in coping with moral distress as they care for patients.

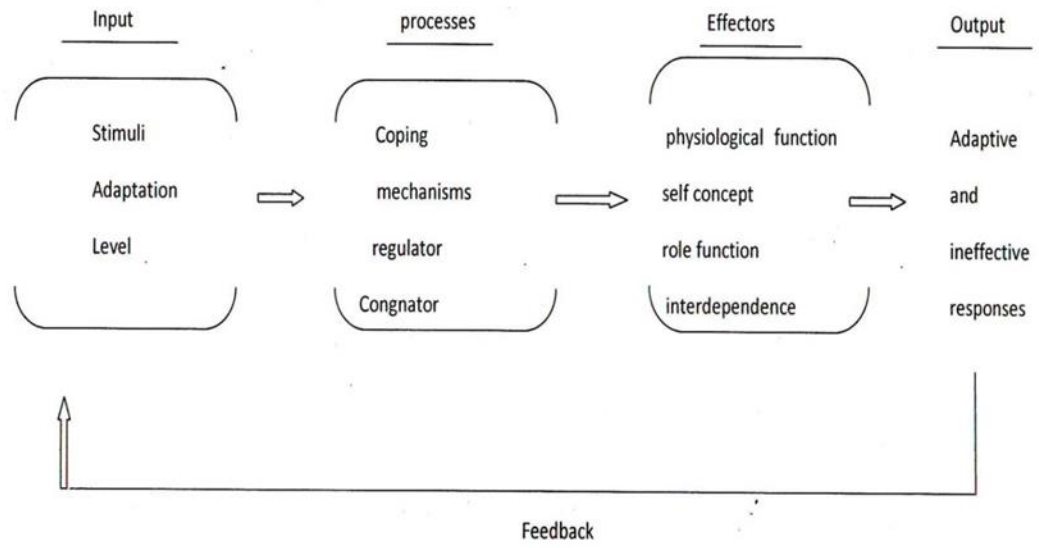


Figure 1.1: Shows Roy' s adaptation model theoretical framework

## 1.7 Conceptual Framework

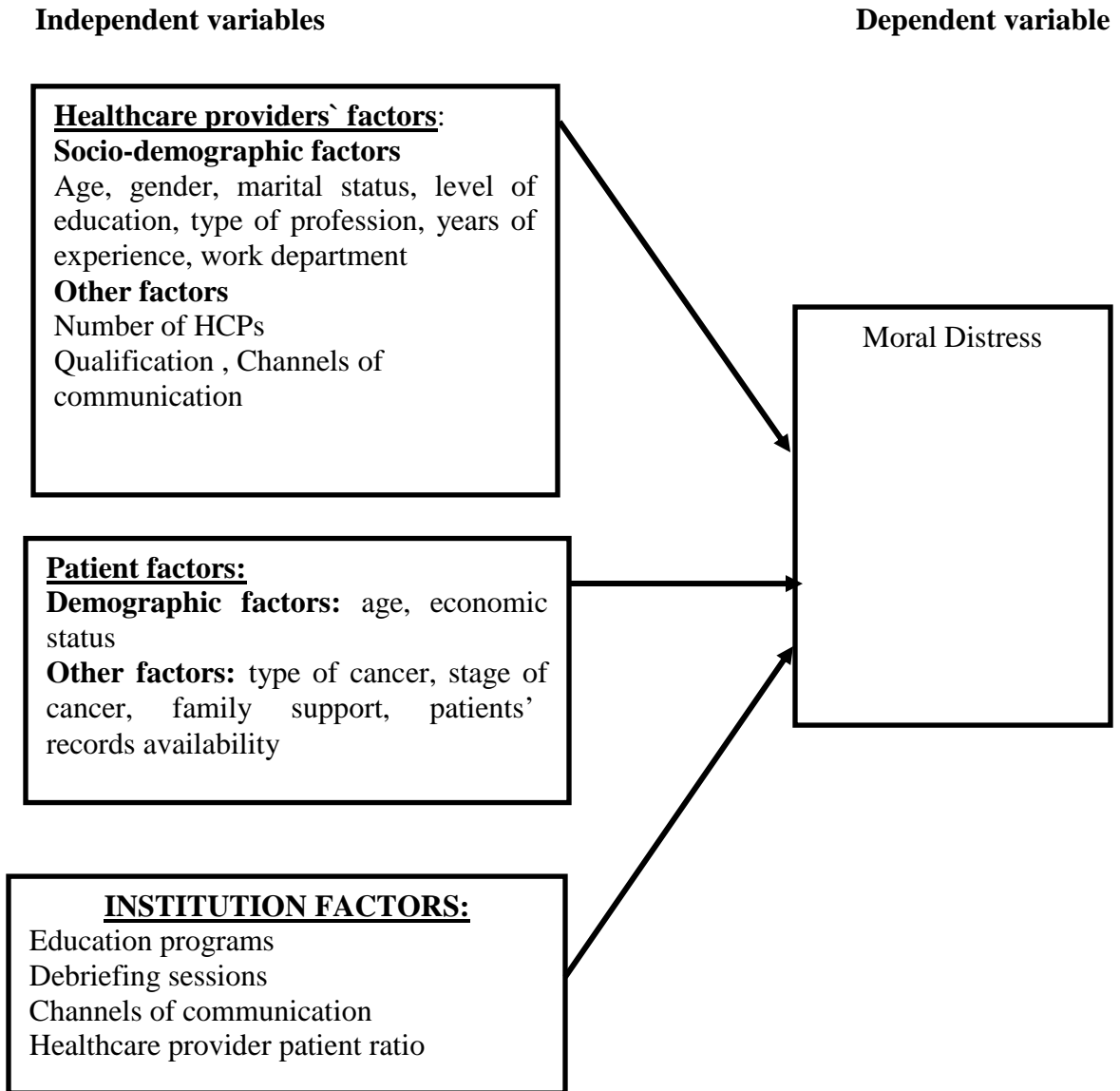


Figure 1.2.: Shows the Conceptual Framework

**Source: (researcher 2020)**

In the oncology department, the healthcare providers receive triggers (stimuli) from sick person, households, fellow workers plus the working domain itself that evokes a response. This correlate with the one of the objectives that are addressing the factors causing moral distress. This reaction may be constructive and/or disadvantageous and

fluctuate depending on the circumstances surrounding the healthcare providers in oncology department. This paradigm was constructed to focus on individual's adaptation to a dynamic surrounding and to give direction to the process by which healthcare provider aid adaptation. That is, a negative coping mechanism results in maladaptation causing moral distress.

Roy (2009) describes adaptation as a procedure and consequence. He avers that person as individuals or groups with cognizance apply consciousness and choice to produce human and eco-friendly amalgamation through intellect and feelings. This adaptation comprises of four adaptive models which represent how humans react to stimuli (causative factors) from the environment. These are physiological, self-concept, function, purpose and interdependence, with each representative of a combination of conducts that stimulate the individual's movements towards the broad objectives (survival, growth, reproduction, mastery). The coping can be either adaptive or non-adaptive (Roy C. 2009). How is this useful to the healthcare providers in the oncology department at the KNH? Healthcare providers' appreciation of the significance of adaptation will help them to cope with their demanding and ever-changing work environment.

The human adaptive structure is composed of three ranks as follows: Integrated, compensatory, and compromised (Roy C. 2009). The integrated level depicts the person functioning as a whole to satisfy human desires. Here, the healthcare provider can identify those repetitive circumstances can lead to a perception of apprehensiveness. Unlike the integrated level, the compensatory level is triggered by a situation or a

challenge, where a healthcare provider may or may not take into consideration the feelings of uneasiness. The compromised adaptation happens when the compensation level becomes insufficient in dealing with the uneasiness.

Moral distress experienced by the healthcare providers indicates a compromised adaptive level and has had a severe impact on the effectiveness of healthcare providers at their workplaces, especially the oncology departments at KNH. Hence, the study findings will be of great significance to all people involved, especially the HCP and healthcare institutions involved.

Human behavior refers to either internal or external actions or reactions, inborn, or assimilated under precise conditions whose control procedures result in an interactive response (Roy, 2009). In this study, the process begins when the healthcare providers are confronted with a circumstance that led to uneasiness, resulting in necessity to acclimatize to circumstances once coping mechanisms are applied. This situation may lead to moral distress if the healthcare provider cannot cope with the circumstances or use non-adaptive coping approaches (Erickson, J. M. 2015). Therefore, the purpose of this research is to generate data to show the relationship between the factors above and help examine the extent of the problem and available coping mechanisms to these situations.

Stimulus provokes a response and points out the interactions for the human system and the environment. The stimulus is classified into three categories: focal, contextual, and residual. Whereas focal stimuli demand prompt attention, contextual stimuli are present in surroundings and situations. The model will help in establishing the determinants of

moral distress among healthcare providers employed in oncology department. It will also enable in establishing the causative factors of moral distress referred to as stimulus in Roy's model of adaptation and the coping strategies employed by them.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter discussed moral distress among healthcare providers working in oncology departments in general, and specifically address the causal factors to moral distress to and their relationships amongst the HCP working in oncology departments, at Kenyatta National Hospital .In addition, this chapter discusses the coping strategies healthcare providers use to deal with moral distress.

### **2.2 Moral Distress among Healthcare Providers in Oncology Units**

The literature describes moral distress as an existing and significant problem affecting healthcare providers. Several studies carried out on moral distress report that healthcare providers in oncology departments experience high intensities of moral distress than their contemporaries working in other acute care settings (Matey,2016). In a study carried out in the pediatric oncology in Sweden, nurses recorded outstandingly greater occurrences with a high number in overall for moral distress compared to other healthcare providers related to lack of capability and continuity of personnel (Pernilla, Cecelia, & Klas,2018).

A study done in San Diego indicated that Moral distress was experienced more than once in 67% (n = 101) of respondents (Davidson et al., 2016). Furthermore, one more study in Italy indicated that majority (85.75%) of the healthcare providers in oncology had moral distress (Lazzarin, Biondi & Mauro,2014). These findings are supported by another study done in Germany, which showed an elevated prevalence of moral distress

among healthcare providers (Mehlis et al.,2018). That is 67% among physicians and 74% among nurses.

Consequently, the findings in Italy also showed that healthcare providers experienced moral distress. were connected the care of patient and the contempt to the freedom of the patient, sequentially (Isolina, Graziella, Julia, Rafaela & Edison.,2018). A study carried out among doctors working with cancer patients at National Cancer Institute, Sri Lanka, indicated that moral distress among the healthcare providers taking care of cancer patients was high scoring 91.2%.% ( Amjed et,2019).

In sub-Saharan Africa, healthcare providers rendering services to cancer patients experience moral distress due to late stage presentation (about 80%) of cancer patients at the time of diagnosis as a result of limited training about cancer diagnosis and treatment, scarcity of diagnostic pathologists and costly diagnostic testing (Thomas & Rahel,2016). Another study done in Ethiopia indicated that majority of HCPs ( 70.16%) experienced a high level of moral distress due to HCPs to population low ratio ( Beyaffers Woldetsadik & Gizaw ,2020)

In Kenya, cancer comes third in cause of death after infectious and cardiovascular diseases ,and being diagnosed late and the Kenya' s poverty level complicate its management .Malloy et al.,2017.A research conducted in Kenya indicated that inadequacy of resources and overwhelming workload generated moral distress among the healthcare providers.( Maranga et al.,2017) .At Moi Teaching and Referral Hospital (MTRH),healthcare providers experience moral distress when the patient with advanced cancer ,with limited care were exposed to futile treatment.(Owiti,2018).

In addition, healthcare providers at KNH oncology departments experienced different frequencies of moral distress including directives such as not to give resuscitative measures, informed consent to treatment, medication blunders linked to chemotherapy and over or under use of pain management. (Kehinde et al.,2019). Another study showed that 55.9% of the healthcare providers at MTRH frequently got overwhelmed by the work because of staff shortages and 88.2% due to nurse-physician conflicts. (Gitonga & Leonard.,2017).

### **2.3 Factors that cause moral distress among healthcare providers working in oncology units**

The factors can be summarized into three categories as follows healthcare providers individual factors, patient factors and institution factors as described in details below.(Vargas & Concha,2019).

#### **2.3.1 Relationship between health care provider individual factors and moral distress**

Health care provider' s individual and socio-demographic factors such as age, sex, marital status, type of profession, level of education, qualifications of the HCPs, the number of years worked, and the work department have been linked to moral distress. Other factors such as Number of HCPs and channels of communication add significantly to the heights of moral distress experienced by the HCPs. (Lamian et al.,2017; Shereen & Hanan,2017; Matey (2016) .In addition, poor ethical climate (poor support) among colleagues, not participating in decision-making and aloof nurse-physician collaboration correlated with increased moral distress (Lamian et al., 2017)

A research carried out by Christopher O' Connell, 2015 showed a significantly statistical disparity based on gender, where female healthcare provider experienced a significantly higher incidences to moral distress than their male counterpart (O' Connell, C., 2015). Another study done in Ethiopia showed the contrary that male HCPs experienced high levels of moral distress compared to the females due to poor public value and low self-esteem (Beyaffers et al., 2020 )

Other studies have also established that age, and particularly the number of years spent in practice can influence moral distress among healthcare providers working in oncology units (Borhani et al., 2015). The advancing in age and the number of years worked were related to the decreased level moral distress among healthcare providers working in the oncology department. With growing age and years of service, healthcare providers gain more understanding and adopt efficient defense mechanisms while encountering ethical challenges (Borhani et al. 2015). Some studies showed that moral distress would steadily reduce or even die out due to experience and by having more freedom (Lievrouw et al., 2016). Thus, the younger age experience greater levels of moral distress.

In some studies, however, the contrary was established in regard to years of experience. The span of time in the department was correlated with a greater perception of moral distress with healthcare providers with more than five years having greater moral distress compared to those with less than five years. (Isolina et al., 2018).

In research published in a Journal by Janet Sirilla, that observed variables of moral distress, age, education level, and type of unit established a reverse correlation between

level of education and moral distress. Other studies also showed similar correlation (Lazzarin et al.,2014). The research found out that moral distress is experienced in oncology sections irrespective of experience in the same field or the specific unit (Sirilla, J., 2014).

In addition, it was observed that the healthcare providers who had specialized in oncology or had post undergraduate education experienced higher incidence of moral distress. (Borhani, F., Mohammadi, S., & Roshanzadeh, M.,2015). Consequently, the level of awareness was also associated with severe moral distress. (Isolina et al.,2018). The healthcare providers who reported being aware of the availability of ethics committee in the institution and probably participated in them, had a higher moral distress associated with not respecting the patient' s freedom and the absence of capability in the team. However, some studies failed to outline any linkages between moral distress and demographic characteristic such as the level of education and marital status. (Michela, Andea & Stefania, 2014).

In regard to the number of years worked, increasing age and years of service enables healthcare providers to more skillful and assertive in handling ethical challenges (Borhani et al.,2015) Moreover, some studies revealed that having more experience and authority or autonomy led to decrease or even disappearance of moral distress (Lievrouw et al.,2016). On the other hand, deeper experiences in handling oncology patients were associated with severe moral distress (Cohen, J. S., & Erickson, J. M. 2006). However, some studies did not show any association with moral distress and demographic characteristic (Michela, Andea & Stefania, 2014).

Other factors such as number of HCPs working in the oncology units and channels of communication were found to significantly cause moral distress. The ratio of HCPs in oncology unit may contribute significantly to the levels of moral distress since the fewer they are the higher is the workload and hence the incidences of moral distress (Sandeberg et al., 2020). Increased workload due to many patients results in limited time among the healthcare providers to communicate, reflect, and discuss ethical issues in specific clinical situations (Vargas,2019). This situation was backed up by another study that identified that significant workload caused moral distress among healthcare providers (Shereen & Hanan,2017).

Other studies showed that ineffective channels of communication among the staff working in the oncology units may cause problems of misinterpretations of information and thus misunderstanding that could provoke moral distress among the unit members. Research done by Pye,2013 indicate that poor and ineffective team communication and scarcity of dynamics and especially in areas of decision-making can impact the prevalence of moral distress and suggests that inclusion of health care providers as equal partners with clear channels of information communication flow and deliberations is critical in addressing the prevalence of moral distress (Pye K. 2013).

### **2.3.2 Relationship between patient factors and moral distress**

Patient' s socio-demographic status alongside other factors such as type of cancer, stage of cancer, family support, and availability of patient' s records have revealed a significant influence in regard to moral distress.

Research has shown that age of the patient triggers moral distress in healthcare providers. HCPs working in paediatric oncology units experienced more moral distress as opposed to those who worked in the adult oncology department (Lazzarin et al.,2014).The study showed that nearly 70% (68.5%) of the healthcare providers who worked in paediatric oncology/hematology departments wanted to leave the unit because, according to them, treating and nursing children with blood related diseases/cancer was emotionally very challenging and called for a more compassionate and boundless physical and psychological effort. Consequently, the young age of the patients was associated with moral distress among healthcare providers. Another study revealed that it was very difficult and distressing to talk about death to a patient aged 29 years since it will destroy his hope (Mehlis et al.,2018).

In regard to patient' s stage of cancer, advanced stage of cancer causes higher moral distress due to the limited treatment available.(Salim et al.,2018; Mehlis et al.,2018 ).Research have highlighted that moral distress encountered by the healthcare providers caring for patients with incurable cancer are related to: limited treatment options , open communication with patients regarding disease progress, controlling clinical manifestation such as pain ,and collaborative treatment that is perceived as not suitable because of the advanced stage of cancer ( Lazzarin et al.,2014).

Information delivery to cancer patients is one of the ethical issues that have been associated with moral distress among healthcare providers. Cancer patients are put through several investigations which require an informed consent from both the patients and the significant others. The patients lacking adequate information concerning their

diagnosis or plan care increases moral distress and patient suffering (Vargas, 2019). Hesitating to have open communication with patients in the company of their relatives is one of the principal ethical dilemmas encountered by healthcare providers. It becomes even complicated when the family finds it hard to perceive the information. Consequently, improper delivery of information could threaten the patient's autonomy in decision-making, as their wishes may not be taken into consideration (Isolina et al., 2018).

Therefore, poor channels of communications arising from the patient's family members unrealistic expectations may cause moral distress among healthcare providers (Sandeberg et al.,2020). Communication may be hindered by unrealistic expectations in life-threatening situations. Family members' prognostic understanding and attitudes can become deterrent to discussing advanced care planning with the patients. This can make it impossibility to discuss about death, such as disclosing poor prognosis to a dying child as requested by the parents. (Sandeberg et al.,2020). Moral distress was also associated with the significant others' willingness to prolong the patient's life, despite it being unprofitable to the patient (Isolina et al., 2018).

Other studies have also shown that patients' family support contributes to moral distress among the healthcare providers. Patients' /Parents' /families' unrealistic expectations caused moral distress among healthcare providers (Sandeberg et al.,2020). Unrealistic expectations hinder communication in life-threatening situations. Parent' s prognostic understanding and attitudes was rated as one of the barriers in discussing the treatment with the children. Additionally, not disclosing poor prognosis to a sick child

as requested by the parents was slightly more morally distressing (Sandeberg et al.,2020). Highest score for moral distress was also associated with complying with the family' s wish of prolonging patient' s life, despite it not being the best the best alternative (Isolina et al.,2018).

Incomplete patients' records have shown to contribute to moral distress among the healthcare providers (Vargas et al.,2015). This hinders the continuity of quality care to the patients . (Kathleen,2017). The majority of healthcare providers caring for patients with terminal cancer experience moral distress in regard to limited management such as "Do not resuscitate" and no transfer to the Critical Care Unit (Katja et al.,2018).

### **2.3.3 Relationship between institutional factors and moral distress**

Institutional factors such as Education programs, debriefing sessions, channels of communication and Healthcare provider patient ratio have shown a significant influence on moral distress.

The absence of debriefing sessions for the HCPs has been linked to cause moral distress among the HCPs in oncology units. HCPs develop greater self-awareness when they interact in freer atmosphere with their peers. They also develop their own individual care, besides developing resilience and their capacities to fight moral distress (Browning E. D.& Cruz J.S., 2018).

Conducting educational and training programs in ethical issues and how to cope with the many challenges associated with oncology patients such as possible death, can be very beneficial to healthcare providers as it will increase their self-trust in their

understanding on how and when to terminate life and on their general knowledge on moral distress (Sirilla.2014). Sirilla further argues that it is important to initiate education programs during the initial stages of practice orientation if we intend the healthcare providers to be familiar with the impact of moral distress.

In a study conducted in Zambia in 2017 among HCPs caring for women with advanced breast cancer, it was found out that healthcare providers who lacked formal training in oncology found it disempowering and one frustrating (Maree & Mulonda ,2017). They discovered that good working environment and opportunities for training were among the things that empowered the healthcare providers. Training was thus rated as a top priority going forward.

Pavlish et al., 2014 says that there is greater need to cultivate moral health structure in communities to give room for ethical participation that upholds trust, communal appreciation, and mutual respect (Pavlish et al., 2014). Another study showed that a very few participants have the required tools to handle issues related to ethics, the time for reflection or even discussion on matters concerning ethical conflicts as they relate to the treatment and care (Bartholdson et al, 2015). The above challenges can be addressed when the HCPs are exposed to adequate trainings and education. There is greater need to empower the HCPs through periodic and targeted trainings to expose them to the challenges in the field.

In addition, recognition of the circumstances that cause moral distress among the health care providers could positively influence on how they handle moral distress (Maningo-Salinas et al., 2010). Therefore, the importance of creating an ethical climate cannot be

gainsaid (Jodoin et al., 2012). Exposure through training is therefore critical. Another study showed that poor job satisfaction, low levels of psychological empowerment and autonomy also contributed to the upsurge of moral distress among HCPs (Lamiani et al., 2017).

Channels of communication seem to present challenges in regard to the mode of how to pass information and manage it in the oncological setting, and the quandaries it may bring especially when it lacks or has incompleteness of information. This however, presents challenges arising from insufficient resources and a definite institution structure (Enfermagem., 2015).

An upsurge number of cancer patients were also found to be one of the situations causing moral distress to a healthcare provider (Sandeberg et al., 2020). Increased workload due to many patients results in limited time among the healthcare providers to communicate, reflect, and discuss ethical issues in specific clinical situations (Vargas,2019). This situation was backed up by another study that identified that significant workload caused moral distress among healthcare providers (Shereen & Hanan, 2017).

#### **2.4 Moral distress coping strategies among the healthcare providers**

Various studies above have established that healthcare providers working in the oncology units do live with moral distress all their lives whether at work at home. Moral distress is part of their everyday reality. Similarly, studies have also established that unresolved moral distress have impaired physical and psychological well-being. Natalie outlines some of these as emotional exhaustion, job dissatisfaction, individual

indifference and counter-productive coping strategies (Natalie et al., 2016; Campbell et al., 2016). Some studies view coping as an ongoing strategy used, particularly in stressful situations and they focus on the multiple aspect of coping (Mahmoud, Matloob & Rahat, 2017).

Another study revealed that moral distress was evident if accompanied by emotional anguish. The study indicated that coping could take place through accurate, free will, agreement, and sixth sense. These four could be combined and depicted to create a tendency of internalizing or externalizing moral distress, with emphasis on coherent or empirical elements (Lievrouw., et al., 2016). In the study, doctors were said to have mainly rational coping style, as the nurses tended to cope more through focusing on feelings and experiences. The study also revealed that people had a different approach of managing moral distress dependent on individual or experiences at workplaces and apparent team culture.

An internalizing is being personally involved in a moral conflict, where one considers moral distress as a norm, which increases deliberation of values and norms, where one reflects on the choices and steps taken and weigh up all possible outcomes (Lievrouw et al.,2016). This involves confrontational coping, seeking social support and accepting responsibilities.

In regard to externalizing way of coping, healthcare providers disowns and turns away recognizing the cause and instead focusing on causes that are beyond one's grasp. This is expressed through the distancing attitude of the healthcare providers (Lievrouw et al., 2016). Additionally, added studies supports that healthcare providers responds to moral

distress in many ways such as self-doubt ; outrage; distancing and escape -avoidance towards patients (Shereen & Hanan,2017); poor quality care delivery to the patients; leaving the position or profession (Matey,2016); going against administrative rules; eluding particular patients and purposely dodging certain duties (Corrado & Molinaro,2017).

In addition, healthcare providers focus on rational measures of coping by focusing on the theoretical and academic rationale, processes, and structures. Healthcare providers admitted that when confronted with moral distress, they use their knowledge without really having to be empathic (Lievrouw et al., 2016). This allowed enough time for everyone to formulate their rationale.

Furthermore, healthcare providers handled moral distress by focusing on experiential elements of experiences and feelings of everyone involved such as debriefing sessions (Lievrouw et al., 2016). In addition, one of the coping strategies used by the healthcare providers was to attend the weekly reflection and debriefing meetings, which helped them to express their feeling through open discussions.

## **2.5 Summary of the reviewed literature**

Literature has shown that moral distress is a concern in the healthcare setting among HCPs, yet little is known in oncology setting. Exploring moral distress in HCPs working in oncology units will help the HCPs to be able to identify the situations that causing moral distress and its effects on HCPs, patients plus institution at large. First, exploring moral distress among the HCPs working in oncology will help the institution

to identify ways that will enable the HCPs to deal or cope with moral distress to prevent compromising their health and the quality of care to the patients.

Coping with moral distress can arise during a career development then get influenced by the team context, organisation culture and training. Moral distress can result in job displeasure, burnout, psychological and emotional effects, poor patient care evidenced by increased patient suffering and/or increased hospitalization period, departure and/or withdrawing one-self from patient and family. Proper interventions will determine and prevent the frequency and intensity of moral distress.

## **CHAPTER THREE: MATERIALS AND METHODS**

### **3.1 Introduction**

This chapter discussed the study methodology beginning with study design, study area setting, study population and sample, sampling procedure, sample size determination, sampling method, criteria for inclusion and exclusion, methods of collecting data, instruments, pretesting of data collection process, management, analysis and presentation of data, ethical considerations, and study limitations.

### **3.2 Study Design**

This study employed a correlational cross sectional study design using quantitative approach. The study validated the existence of MD among the healthcare providers working in oncology units at KNH, measure the independent and dependent variables and assess the relationship between them without manipulating or controlling the independent variables.( natural setting) ,and finally establish the coping strategies adopted by the HCPs working in oncology department at KNH.

### **3.3 Study area and setting**

The study was conducted in the Oncology department at the Kenyatta National Teaching and Referral hospital located in Upper hill, Nairobi, Kenya. This hospital was acclaimed in 1900. Being the vastest hospital in the Eastern and central Africa, it a bed capacity of 2000. Consequently, KNH plays a vital role as a teaching hospital for numerous higher learning institutions such as university of Nairobi. In addition, the hospital also operates both general and specialized clinics alongside in-patient' s services in surgical, medical, obstetrics and gynecology, pediatrics' , Ear Nose and

Throat (ENT) and ophthalmology. The venue will be at Cancer Treatment Centre. i.e. Radiotherapy Clinic (brachytherapy and EBRT) GFC Clinic (chemotherapy). On average, over 200 patients are seen daily and 2500 new cancer cases are seen yearly. It provides comprehensive cancer services that includes: Radiotherapy (Brachytherapy and EBRT), Chemotherapy, Hormonal therapy, Nutrition and Counseling, Pain and Palliative care services, facilitates both in-patient and outpatient referrals. It is managed by multi-disciplinary team of professionals from different departments including oncologists (medical, surgical and radiation), Pathologists, General practitioner, physicists, psychologists, dosimetrists, specialist nurses, general nurses, record and information personnel, nutritionists, social workers (lay navigators), pharmacists, technicians and therapist.

### **3.4 Study population and sample size**

The population of study was 200, with a sample size of 145 (132 +10% of 132 = (132+13), sampled from the 200 healthcare providers study population working in all oncology departments at KNH. The study respondents comprised of the nurses, registrars, clinical officers, consultants, radiologists, medical officers as indicated in table 3.1.

Table 3.1: Summarizes the study population

<b>Department</b>	<b>Number of Nurses</b>	<b>Consultants</b>	<b>Registrars</b>	<b>Medical officers</b>	<b>Radiologists</b>	<b>Total</b>
GFB-	12	3	2	2	0	<b>19</b>
GFD	12	3	3	1	0	<b>19</b>
Ward 1 E	10	3	2	1	0	<b>16</b>
Ward 8C	11	2	3	1	0	<b>17</b>
Private wing	12	2	2	2	0	<b>18</b>
Cancer treatment Center	20	4	5	2	5	<b>36</b>
Day Rooms	34	5	6	1	0	<b>46</b>
Palliative care	9	0	2	0	0	<b>11</b>
<b>Total</b>	<b>133</b>	<b>24</b>	<b>27</b>	<b>11</b>	<b>5</b>	<b>200</b>

### 3.5 Sampling procedures

#### 3.5.1 Sample size determination

The sample of the population was calculated by Andrew Fischer calculation formula.

Fischer et al., 1998. For a population greater than 10,000;

$$n = \frac{Z^2 PQ}{d^2}$$

$$d^2$$

Where;

$n$  = Sample size

$p$  = Population proportion with the desired characteristics, which is 50% (0.5) because  $p$  is unknown

$Q$  = Population proportion with no desired characteristics, which is  $1 - 0.5 = 0.5$

$Z$  = Normal deviation at the desired confidence level. 96% will be the confidence level thus the  $Z$  value is 1.96.

$d$  = Margin of error which is 0.05

$$N = \frac{1.96^2 * 0.5 * 0.5}{0.05^2}$$

$$= 384.16$$

which equals to 384.

Since the population of the healthcare providers working in oncology department at KNH is 200, a calculation for a population less than 10,000 was applied as follows.

$n_f = n / (1 + n/N)$  where;

$n_f$  = The desired sample size

$n$  = The desired sample for a population above 10000 which is 384

$N$  = Estimate the population of the HCPs working in oncology department at KNH is approximately 200 as the departmental statistics.

Therefore,

$$N_f = 384 / (1 + 384/200) = 131.5 = 132$$

A 10% increment was done to account for non-response and incomplete data

Sample size of the study was 145 (132 + 10% of 132 = (132+13))

### **3.5.2 Sampling method**

This research applied stratified proportionate random sampling method to identify study participants from the study population. Stratified sampling is a probability sampling which aims to identify a representative sample from the study population whose likelihood of being selected is known and also to obtain study generalizability. The population was grouped into strata (specialization, gender, age, and departments) to ensure equal representation of the study population. Specialization included the nurses, consultants, registrars, medical doctors and radiologists by dividing them into homogeneous strata; gender strata were either male or female; age was also well distributed to ensure equal representation of the study population and finally all the departments were also divided equally in relation to the sample size calculated above.

The following steps were employed to select the study participants in regard to stratified proportionate random sampling method.

1. Defining the study population of the study of all the healthcare providers working in Oncology department (200)
2. Selecting the relevant strata in regard to the study population. The healthcare providers working in Oncology department were stratified into the type of gender

(male/female); oncology department (wards etc) ,healthcare providers categories (Consultants, Registrars, Medical officers, radiologists, nurses).

3. Listing the study population from each strata identified in step 2 (Wards).That is all the HCPs working in Oncology departments at KNH.
4. Noting down the population according to the chosen stratification
5. Selecting the sample size from the study population per strata
6. Calculating a proportionate stratification by multiplying the desired sample size (n) by the proportion of units in each stratum
7. Selecting the sample using a simple random sampling.

**Table 3.2 : Study sample determination per department study population**

<b>Department</b>	<b>Study population of HCPs per department x</b>	<b>Calculation: <math>x/t*r</math></b>	<b>Study Sample Y</b>
GFB	19	$19/200*145=13.7$	14
GFD	19	$19/200*145=13.7$	14
Ward 1 E	16	$16/200*145=11.6$	12
Ward 5C	18	$18/200*145=13.05$	13
Ward 8C	17	$17/200*145=12.32$	12
Private wing	18	$18/200*145=13.05$	13
CTC	36	$36/200*145=26.1$	26
Day rooms	46	$46/200*145=33.35$	33
Palliative care	11	$11/200*145=7.97$	8
<b>Total</b>	<b>200</b>		<b>145</b>

The above table 3.2 indicates how each sample size from each department was arrived at using the total population of the HCPs per department .The total study population in all oncology departments is 200 ,while the total sample size as calculated is 145. Therefore, out of the 145 sample size, each department is represented by using stratified proportionate random sampling .That is ,the sum of HCPs in each department ,fractionated by the total study population ,then multiplied by the total sample size. For instance, ward 5C has 18 HCPs. To get the sample size for that ward, I took 18 divide by the total study population then multiply by the total sample size.  $\{(18/ 200)* 145=12$ .

#### **3.5.2.1 Proportionate sampling of each category of the healthcare providers**

The proportionate sampling was conducted to determine respondents for each category of healthcare providers by dividing each category of the HCP (let it be X) by the study population in each department, then multiply by the sample size from each department as calculated in the tables 1 and 2 above respectively. The steps were repeated in all the oncology department.

#### **3.5.2.2 Recruitment strategy and consenting procedures**

Upon verbally giving in to take part in the study, the eligible participant will be taken to a separate room. The researcher administered and took participants through the informed consent information sheet containing study information and the written consent form in English language. The contents in the information sheets include: introduction, purpose and procedure to be used, voluntary participation potential risks and benefits of the study, participant' s right to participate or withdraw from the

research, study duration, documentation of interview, sharing of results and confidentiality. Eligible participants were allowed to ask questions and seek clarifications on any aspect that were not be clear about the study. A witnessed signature was obtained from the candidate before commencing with the study.

### **3.5.3 Inclusion and Exclusion criteria**

#### **3.5.3.1 Inclusion Criteria**

This study included the healthcare providers working in Oncology department at the time of the study and not on leave. The study participants were KNH employees (permanent or contract) and gave an informed consent to get involved in the research study. This helped in meeting the study objectives; ensure homogeneity of the sample population increase the likelihood of finding true association of independent and dependent variables of the study and increase the reliability and validity of the research since they work directly with the cancer patients.

#### **3.5.3.2 Exclusion criteria**

The study excluded all the healthcare providers who are working the oncology department but were on leave and those who did not consent to participate. Diploma and undergraduate students on clinical placement were also be excluded because they spend less time in their respective rotations.

### **3.6 Study variables**

The dependent variable was one (moral distress) and three independent variables namely: healthcare provider factors, patient' s factors and the institution factors. The healthcare provider factors comprised of socio-demographic factors, type of profession,

department of work (adult or paediatric), number of the healthcare providers and channels of communication.

The patient factors as a second independent variable also included patient socio-demographic factors, economic status and other factors such as family support, type and stage of cancer and patients' records. The institution factors comprised of education programs, debriefing sessions, channels of communication and the healthcare provider patient ratio.

### **3.7 Data Collection instruments**

Data was collected using a structured, self-administered questionnaire, comprising of three main sections, namely the sociodemographic section, the Revised Moral Distress Scale and moral distress coping strategies. The structured self-administered questionnaire was used in this study to enable quick acquisition of massive amounts of information from a large representative sample in a relatively short period of time at low cost. **Modified Distress Scale-Revised (MDS-R), by Corley et al, as a tool to measure the level of moral distress.**

#### **3.7.1 Moral Distress Scale-Revised (MDS-R)**

The information was assembled using Modified Distress Scale-Revised (MDS-R), which was originated by Corley et al. MDS-R measures an individual's perceptions to a situation based on (1) intensity of moral distress and (2) frequency of the encountered situation. This scale has 38 items that measure the frequency and intensity of moral distress. Hamric et al revised and validated the MDS scale thus shortening the original 38 items to 21, in addition to developing six parallel versions of the scale. This

increased its applicability to different settings and populations beyond nursing to include adult and pediatric physicians and other healthcare providers.

### **3.7.2 Coping strategies**

This is one of the data collection instruments that was utilized to gather data on the main questionnaire (section C). The instrument has 13 items where by it will be scored using either 2 for the coping strategy used and 1 if the coping strategy was not used. The coping strategies were obtained by finding the total number of each coping strategy across the study participants then converting it to percentages to identify which coping strategy were used most/least by the study participants.

### **3.7.3 Reliability and Validity**

Reliability was ensured by consistently applying data collection tools and ensuring all participants are given same information and tested under same condition. The study used a self-administered questionnaire and Moral Distress Scale -Revised administered to the healthcare providers. The tools were evaluated for consistency of providing similar results among the healthcare providers working in oncology department to test for reliability. Cronbach' s alpha was utilized to compute internal reliability.

To ascertain validity of data collection tools, the study underwent an initial pilot study on 15 nurses working in the oncology department of a hospital of the same level. This helped to ascertain that the tools capture what they are intended to capture. Reliability and validity results helped in checking the consistency of results across the HCPs working in oncology department, confirming if results can be reproducible and checking how well the results corresponds to the research objectives.

### **3.7.4 Pre- testing**

The pretesting of the tools for data collection was done using respondents with similar characteristics from **an institution of level six in the country, Moi Teaching and Referral Hospital Eldoret**. The tool was administered to 10% of the sample selected for the main study. Therefore, a total of 15 respondents of the HCP will be interviewed. Pretesting allowed room for rectifying any mistakes and for making changes should there arise some.

### **3.7.5 Data Collection Process**

Data was collected by first identifying the strata selected, that is the oncology department, HCPs categories, age and sex and ensuring their actual representation in the study population. Second, was the numbering of each subject within each stratum with a unique identification number. The third step was selection of sufficient numbers of subjects from each stratum using the stratified proportionate random sampling to minimize bias. The fourth step explained to the study participants the nature and purpose of study through both verbal and written communications.

The self-structured questionnaire was then be given to the study participants once they give an informed consent. The respondents were informed not to write names on the questionnaires and instead use serial numbers that were written on each questionnaire for easy tracking. The participants were allowed to ask questions for verification. The questionnaires were collected in person by the principal investigator the same day within 30 minutes of administration. All the collected questionnaires were securely kept to avoid loss or damage to data and confidentiality.

### 3.7.6 Data Management

Both the complete filled questionnaire and the online data from the participants was collected and kept under key and lock for confidentiality and also avoid losing of the data. The researcher only accessed the data for purposes of analysis and after this process all data tools will be securely preserved.

### 3.7.7 Data analysis and presentation

Data will be analyzed was done using Statistical package for social sciences version 26 and descriptive statistics to present demographic data and responses to moral distress items; Pearson r correlation to examine correlation between the independent variables and dependent variables; logistic regression analysis to identify the predictors for moral distress. Data from the questionnaire and the Modified Distress Scale-Revised tools were tabulated into descriptive statistics to show the correlation between different independent variables and dependent variables. Negative scores such as the statement, “ *Ethical issues are hardly discussed in the department.*” were transformed to assume a positive direction before composite scores was computed. The measurement of moral distress was based on composite scores as shown in Table 3.3.

**Table 3.3 : Shows Moral Distress Scale-Revised (MDS-R)**

<b>Composite score for md</b>	<b>Moral distress scale</b>
0-42	Absence of moral distress
43-48	There is very mild moral distress
85-168	Presence of mild moral distress
169-252	Presence of moderate moral distress
253-336	Severe moral distress

Pearson chi-square test to Fischer' s exact test were conducted to investigate factors associated with moral distress. Multivariable analysis was performed Binary logistic regression was performed to investigate the independent predictors of moral distress. Significance was evaluated at  $p < 0.05$ .

### **3.8 Ethical Considerations**

Ethical considerations were observed. Clearance to conduct the research was sought from Kenyatta University Ethics and Research Committee. Permission was obtained from NACOSTI before submitting the thesis to the Kenyatta National Hospital - University of Nairobi Ethics and Research Committee (KNH-UoN ERC). Informed consent was obtained from the participant who accepted to participate in research. Privacy and confidentiality were guaranteed by ensuring that no personal identification is used on the questionnaire during data collection. Only numbers were used to achieve privacy, and the data collected was treated with maximum confidentiality. There was voluntary participation of the study participants. There was no potential harm of any form (physical ,psychological ,emotional ) to all the study participants .The data collected was kept under key and lock and only to be accessed by the principal investigator only.

#### **3.8.1 The consenting process**

The process of obtaining the consent was conducted by the principal investigator and was carried out in the respective Oncology departments at KNH. After selecting the study participants, the following steps were taken to gain the informed consent from the HCPs working in Oncology department at KNH.

- i. Explaining verbally all the pertinent information to the study participants. These included the purpose of the study in addition to the procedures, confidentiality risks, benefits ,alternatives to participation and allowing time for questions from the study participants.
- ii. The study participants were provided with a written consent form to read and understand and be given sufficient time to decide on whether to participate.
- iii. The principal investigator answered more questions from the study participants and still gave room to either accept or decline to take part in the study in addition to thanking those who decline to consent for their time.
- iv. The principal investigator obtained written informed consent from those who agreed to take part in the study by allowing them to sign.

### **3.9 Study Limitations**

Lack of references, few studies done regarding HCPs' s moral distress. Only HCPs working in oncology department at KNH will participate in the study. HCPS working in other departments /other hospitals did not participate in the study. HCPs' work overload might result in long waiting time to collect data as HCPs were having no or little time to sit and complete the questionnaire. The instruments that were used to collect data both depends on the willingness of the respondents to give accurate information which might not apply to every study participant.

## **CHAPTER FOUR: RESULTS**

### **4.1 Introduction**

The study sought to describe determinants of moral distress among healthcare providers working in the oncology department, KNH. The specific objectives included level of distress among healthcare providers, the association between healthcare provider individual factors, patient factors, institutional factors and moral distress among healthcare providers at KNH oncology department. A total of 145 healthcare providers were enrolled in the study. All the questionnaires were completed and returned for data analysis representing a 100% response rate.

### **4.2 Descriptive findings of the study participants**

#### **4.2.1 Individual related characteristics of healthcare providers working in the oncology department at Kenyatta National Hospital**

The analysis showed that 56.6%(n =82) of the respondents were male. In investigating age group of study participants, 40.7%(n =59) were aged between 41 and 50 years. On marital status 59.3%(n =86) of the participants were married. Analysis of cadre revealed that 62.1%(n =90) were nurses while 20.7%(n =30) were registrars. Further, 13.1% (n =19) of the participants had received specialty oncology training and 51.7% (n =75) had worked at the oncology department for a period of two years or below as shown in Table 4.1

Table 4.1: Individual related characteristics of healthcare providers working in the oncology department at Kenyatta National Hospital

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	82	56.6
Female	63	43.4
<b>Age</b>		
20 - 30 years	53	36.6
31 - 40 years	15	10.3
41 - 50 years	59	40.7
51 - 60 years	18	12.4
<b>Marital status</b>		
Married	86	59.3
Single	59	40.7
<b>Cadre</b>		
Registrar	30	20.7
Consultant	3	2.1
<b>Nurse</b>	<b>90</b>	<b>62.1</b>
Higher diploma	21	14.5
Radiologist	1	0.7
<b>Level of education</b>		
Diploma	33	22.8
<b>Degree</b>	<b>78</b>	<b>53.8</b>
Higher diploma	18	12.4
Masters	16	11.0
<b>Received further training in oncology</b>		
<b>Yes</b>	<b>19</b>	<b>13.1</b>
No	126	86.9
<b>Years of experience in oncology</b>		
≤2 years	75	51.7
<b>More than 2 years</b>	<b>70</b>	<b>48.3</b>

#### 4.2.2 Workplace related characteristics among healthcare provider at the oncology department at Kenyatta National Hospital

Healthcare provider workplace characteristics were assessed using a five-point Likert scale where 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = strongly agree. Most of the participants strongly agreed with the statement that the

ethical climate with their colleagues is supportive 55.9%(n =81) and the statement that ethical issues are collaboratively discussed in the department, 43.4%(n =63) while most of the participant were neutral on the statement that there is poor interpersonal collaboration in the department 46.9%(n =68) as shown in Table 4.2.

Table 2.2: Workplace related characteristics among healthcare provider at the oncology department at Kenyatta National Hospital

<b>Healthcare provider workplace</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
The ethical climate with my colleagues is supportive	2(1.4)	2(1.4)	16(11.0)	44(30.3)	81(55.9)
The channels of communication with other HCP are open	3(2.1)	4(2.8)	27(18.6)	96(66.2)	15(10.3)
There is poor interpersonal collaboration in the department	3(2.1)	51(35.2)	68(46.9)	17(11.7)	6(4.1)
Ethical issues are collaboratively discussed in the department	4(2.8)	10(6.9)	38(26.2)	30(20.7)	63(43.4)
HCP push blame when ethical issues arise in the department	3(2.1)	20(13.8)	59(40.7)	52(35.9)	11(7.6)
There is teamwork among the healthcare providers	3(2.1)	51(35.2)	42(29.0)	31(21.4)	18(12.4)

#### **4.2.3 Patient factors influencing healthcare workers working in the oncology department at Kenyatta National Hospital**

The findings showed that average number of patients allocated daily was 14 (SD±6) patients daily. Majority of the participants, 71.7%(n =104) took care of adult patients. The common cancer stage that patients presented with was stage 3, 40%(n =58). The participants were also asked about common social challenges experienced, these challenges included lack of source of funds to pay bills 91.7%(n =133), lack of family

support 80.7%(n =117), lack of attendance to clinic 69.7%(n =101) and non-adherence to treatment 66.2%(n =96) as shown in Table 4.3.

Table 4.3: Patient factors influencing healthcare workers working in the oncology department at Kenyatta National Hospital

<b>Patient factors</b>	<b>Frequency</b>	<b>Percent</b>
<b>Patients allocated daily</b> (Mean $\pm$ SD)	14 $\pm$ 6	
<b>Age category of patients</b>		
Paediatric	24	16.6
Adults	104	71.7
Both paediatric and adults	13	9.0
<b>Cancer stage</b>		
Stage 1	22	15.2
Stage 2	43	29.7
Stage 3	58	40.0
Stage 4	22	15.2
<b>Common social challenges experienced</b>		
Lack of source of funds to pay bills (n =145)	133	91.7
Lack of family support (n =145)	117	80.7
Non-adherence to treatment (n =145)	96	66.2
Lack of patient cooperation (n =145)	101	69.7
Lack of attendance to clinic (n =145)	53	36.6
Unavailability of patients records (n =145)	32	22.1

#### 4.2.4 Healthcare providers perception on interaction with patients at the oncology department at Kenyatta National Hospital

Healthcare providers perception on interaction with patients were assessed using a five-point Likert scale where 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = strongly agree. The findings showed that most of the participants agreed that there is open communication with patients about their progress, 69.7% (n = 101). Participants also agreed that there is proper control of pain among the patients, 60.7% (n = 88) as shown in Table 4.5.

Table 4.5: Healthcare providers perception on interaction with patients at the oncology department at Kenyatta National Hospital

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
We normally experience limited options for patient treatment	11 (7.6)	43(29.7)	11(7.6)	53(36.6)	27(18.6)
There is open communication with patients about their progress	3 (2.1)	7(4.8)	27(18.6)	101(69.7)	7(4.8)
There is proper control of pain among the patients	2 (1.4)	17(11.7)	29(20.0)	88(60.7)	9(6.2)
I normally find it easy to communicate patient diagnosis to them or their relation	10 (6.9)	50(34.5)	24(16.6)	50(34.5)	11(7.6)
Patients' relatives have unrealistic expectations about me	10 (6.9)	21(14.5)	29(20.0)	69(47.6)	16(11.0)

#### **4.2.5 Institutional factors affecting healthcare providers working in the oncology department at Kenyatta National Hospital**

The findings showed that 31%(n =45) of the participants affirmed that they hold debriefing sessions in the hospital, 44.1%(n =64) agreed that the hospital sponsors for oncology training while 57.2%(n =83) of the participants share with their colleagues when in distress , 34.5%(n =50) share with ward in-charge while 4.1%(n =6) shared with their supervisors and head of department as shown in Table 4.6.

Table 4.6: Institutional factors affecting healthcare providers working in the oncology department at Kenyatta National Hospital

<b>Institutional factors</b>	<b>Frequency</b>	<b>Percent</b>
<b>Hold debriefing sessions in hospital</b>		
Yes	45	31.0
No	100	69.0
<b>Hospital sponsor staff for oncology training</b>		
Yes	64	44.1
No	81	55.9
<b>Whom do you report to when you experience</b>		
Fellow colleague	83	57.2
Ward In-charge	50	34.5
Supervisor	6	4.1
Head of department	6	4.1

#### 4.2.6 Institutional factors affecting healthcare providers working in the oncology department at Kenyatta National Hospital

Institutional factors affecting healthcare providers were assessed using a five-point Likert scale where 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = strongly agree. Majority of the participants strongly agreed that workload in the unit is quite high, 69.7%(n =101). Many of the healthcare providers disagreed with the statement that patient ratio is satisfactory,40%(n =58) as shown in Table 4.7.

**Table 4.7: Institutional factors affecting healthcare providers working in the oncology department at Kenyatta National Hospital**

Institutional factors	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
There is autonomy in decision making	17 (11.7)	58(40.0)	40(27.6)	24(16.6)	6(4.1)
The workload in the unit is quite high	2 (1.4)	9(6.2)		33(22.8)	101(69.7)
The healthcare providers patient ratio is satisfactory	55 (37.9)	58(40.0)	2(1.4)	10(6.9)	20(13.8)
The hospital offers ethical education programs		59(40.7)	65(44.8)	17(11.7)	4(2.8)
There are clear policies and guidelines on how to handle ethical issues in the department	2 (1.4)	56(38.6)	57(39.3)	28(19.3)	2(1.4)
Ethical issues are hardly discussed in the department.	2 (1.4)	48(33.1)	65(44.8)	28(19.3)	2(1.4)

### 4.3 Moral distress among healthcare providers working in the oncology department at Kenyatta National Hospital

The level of distress among healthcare providers in oncology department was investigated using the Moral Distress Scale-Revised (MDS-R). It measures both the frequency of MD events occurring during the working day, ranging from 0(never) to 4 (always), and the intensity of MD associated with those events, ranging from 0 (never) to 4 (a lot of). The findings established that the average MDS-R score was 50.96 with a minimum score of 0 and maximum score of 225. The mean score indicates that most of healthcare workers had mild moral distress as shown in Table 4.8.

Table 4.8: Moral distress among healthcare providers working in the oncology department at Kenyatta National Hospital

	N	Minimum	Maximum	Mean	Std. Deviation
MDS scores	145	0	225	50.96	22.16
Valid N (listwise)	145				

#### 4.3.1 Level of moral of distress among healthcare providers

The level of moral distress was calculated based on the obtained scores where a score of  $\geq 42$  indicated no moral distress, 43 – 168 indicated mild moral distress while  $>168$  indicated severe moral distress. The findings showed that 37.9% (n =55) had no moral distress, 49%(n =71) had mild moral distress while 13.1%(n =19) had severe moral distress as shown in Figure 4.1.

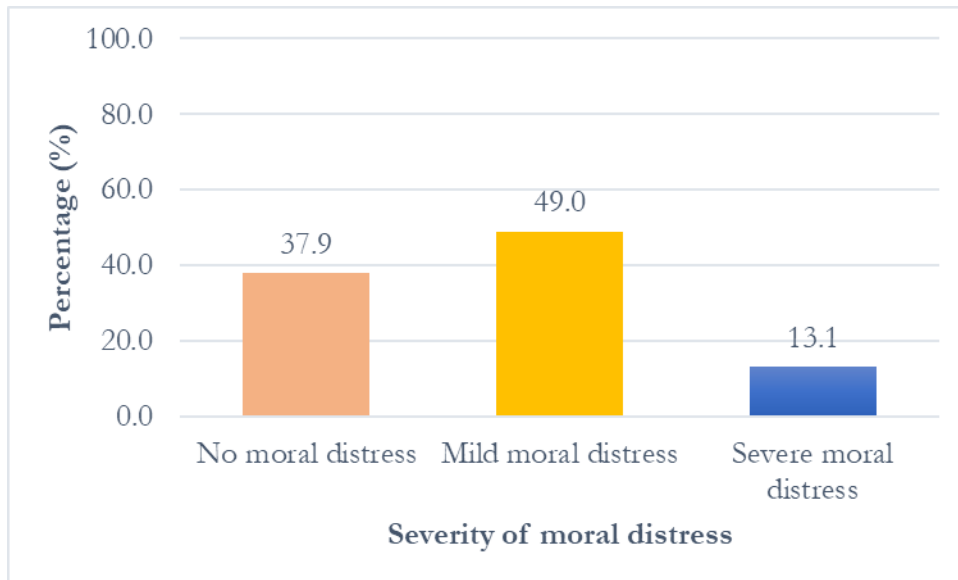


Figure 4.1: Level of moral distress

#### 4.4 Bivariable analysis

##### 4.4.1 The association between health care provider individual factors and moral distress among healthcare providers at KNH oncology department

A chi-square test and Fischer's exact test for association was conducted to investigate the association between health care provider individual factors and moral distress among healthcare providers at KNH oncology department as shown in Table 7.

The findings showed that the proportion of moral distress was higher among those with diploma and undergraduate degree qualification ( $(\chi^2) (3) = 19.87, p < 0.001$ ). Among cadres, the proportion of moral distress was higher among nurses and medical officers ( $(\chi^2)(4) = 11.52, p = 0.021$ ). Moral distress was higher among those with working experience of  $\leq 2$  years ( $(\chi^2)(1) = 3.482, p = 0.045$ ). The proportion of moral distress was higher among those who did not have oncology training ( $(\chi^2)(1) = 6.975, p = 0.006$ ).

Those who disagreed with the statement that there is poor interpersonal collaboration in the department had higher proportion of moral distress ( $\chi^2(2) = 5.708, p=0.017$ ) as shown in Table 10.

Table 4.9: The association between health care provider individual factors and moral distress among healthcare providers at KNH oncology department.

Health provider factors			Moral distress	df	$\chi^2$	p-value	
			Present n(%)				Absent n(%)
Gender	Male		48(53.3)	34(61.8)	1	0.389	
	Female		42(46.7)	21(38.2)			
Age	20 - 30 years		32(35.6)	21(38.2)	3	6.868	0.076
	31 - 40 years		5(5.6)	10(18.2)			
	41 - 50 years		41(45.6)	18(32.7)			
	51 - 60 years		12(13.3)	6(10.9)			
Marital status	Married		52(57.8)	34(61.8)	1	0.231	0.728
	Single		38(42.2)	21(38.2)			
Level of education	Diploma		21(23.3)	12(21.8)	3	<0.001*	
	Degree		56(62.2)	22(40.0)			
	Higher diploma		11(12.2)	7(12.7)			
	Masters		2(2.2)	14(25.5)			
Cadre	Registrar		14(15.6)	16(29.1)	4	0.021*	
	Consultant		3(3.3)	0			
	Nurse Medical officers		55(61.1)	35(63.6)			
	Radiologist		18(20.0)	3(5.5)			
Experience	≤2 years		52(57.8)	23(41.8)	1	3.482	0.045
	> 2 years		38(42.2)	32(58.2)			
Training in oncology	Yes		17(18.9)	2(3.6)	1	0.006*	
	No		73(81.1)	53(96.4)			
Attend ethical course	Yes		6(6.7)	2(3.6)	1	0.355*	
	No		84(93.3)	53(96.4)			
The ethical climate with my colleagues is	Disagree		4(4.4)	0	2	0.134*	
	Neutral		12(13.3)	4(7.3)			

Health provider factors		Moral distress		df	$\chi^2$	p-value
		Present n(%)	Absent n(%)			
supportive	Agree	74(82.2)	51(92.7)			
The channels of communication with other healthcare providers are open	Disagree	5(5.6)	2(3.6)	2	5.708	0.504*
	Neutral	19(21.1)	8(14.5)			
	Agree	66(73.3)	45(81.8)			
There is poor interpersonal collaboration in the department	Disagree	40(44.4)	14(25.5)	2	5.708	0.017
	Neutral	39(43.3)	29(52.7)			
	Agree	11(12.2)	12(21.8)			
Ethical issues are collaboratively discussed in the department	Disagree	11(12.2)	3(5.5)	2	3.853	0.146
	Neutral	26(28.9)	12(21.8)			
	Agree	53(58.9)	40(72.7)			
Healthcare providers push blame when ethical issues arise in the department	Disagree	14(15.6)	9(16.4)	2	3.894	0.143
	Neutral	42(46.7)	17(30.9)			
	Agree	34(37.8)	29(52.7)			
There is teamwork among the healthcare providers	Disagree	36(40.0)	18(32.7)	2	3.894	0.143
	Neutral	29(32.2)	13(23.6)			
	Agree	25(27.8)	24(43.6)			

\*Fischer' s exact test

#### 4.4.2 The association between patient factors and moral distress among healthcare providers at KNH oncology department

The findings from a chi-square test for association revealed that age category of cancer patients, and patients' relatives have unrealistic expectations about me, were significantly associated with moral distress. Healthcare providers who worked with adult patients had a higher proportion of moral distress ( $\chi^2$ ) (2) = 6.563, p=0.019. The proportion of moral distress was higher among healthcare providers who asserted that patients' relatives have unrealistic expectations about them ( $\chi^2$ ) (2) = 13.164, p=0.001 as showed in Table 11.

Table 4.10: The association between patient factors and moral distress among healthcare providers at KNH oncology department

Patient factors		Moral distress		Df	$\chi^2$	p-value
		Present N (%)	Absent n (%)			
Which age category of cancer patients	Paediatric	12(13.6)	12(22.6)	2		0.019*
	Adults	64(72.7)	40(75.5)			
	Both	12(13.6)	1(1.9)			
Which is the most common cancer stage	Stage 1	12(13.3)	10(18.2)	3	1.493	0.684
	Stage 2	25(27.8)	18(32.7)			
	Stage 3	39(43.3)	19(34.5)			
	Stage 4	14(15.6)	8(14.5)			
We normally experience limited options for patient treatment	Disagree	38(42.2)	16(29.1)	2	2.554	0.279
	Neutral	6(6.7)	5(9.1)			
	Agree	46(51.1)	34(61.8)			
There is open communication with patients about their progress	Disagree	7(7.8)	3(5.5)	2		0.714*
	Neutral	18(20.0)	9(16.4)			
	Agree	65(72.2)	43(78.2)			
There is proper control of pain among the patients	Disagree	11(12.2)	8(14.5)	2	1.672	0.433
	Neutral	21(23.3)	8(14.5)			
	Agree	58(64.4)	39(70.9)			
I normally find it easy to communicate patient diagnosis to them or their relatives	Disagree	40(44.4)	20(36.4)	2	1.793	0.408
	Neutral	16(17.8)	8(14.5)			
	Agree	34(37.8)	27(49.1)			
I experience unrealistic expectations from patients	Disagree	23(25.6)	8(14.5)	2	2.462	0.292
	Neutral	17(18.9)	12(21.8)			
	Agree	50(55.6)	35(63.6)			
Patients' relatives have unrealistic expectations about me	Disagree	7(7.8)	15(27.3)	2	13.164	0.001
	Neutral	37(41.1)	11(20.0)			
	Agree	46(51.1)	29(52.7)			

#### **4.4.3 The association between institutional factors and moral distress among healthcare providers at KNH oncology department**

A chi-square test and Fischer' s' exact test for association was conducted to determine the association between institutional factors and moral distress among healthcare providers at KNH oncology department as shown in Table 12. The findings showed that there was significant association between presence of autonomy in decision making and moral distress, ( $\chi^2$ ) (2) = 7.325, p=0.026. The proportion of moral distress was higher among those who disagreed with the statement that there is autonomy in decision making.

Table 4.11: The association between institutional factors and moral distress among healthcare providers at KNH oncology department

Institutional factors		Moral distress			Df	$\chi^2$	P-value
		Present n(%)	Absent n(%)				
Hold debriefing sessions in hospital	Yes	27(30.0)	18(32.7)		0.119	0.853*	
	No	63(70.0)	37(67.3)				
Hospital sponsor staff for oncology training	Yes	41(45.6)	23(41.8)	1	0.193	0.731	
	No	49(54.4)	32(58.2)				
Whom do you report to when you experience	Fellow colleague	50(55.6)	33(60.0)		0.295*		
	Ward In charge	33(36.7)	17(30.9)	3			
	Supervisor	5(5.6)	1(1.8)				
	HOD	2(2.2)	4(7.3)				
There is autonomy in decision making	Disagree	53(58.9)	22(40.0)		7.325	0.026	
	Neutral	18(20.0)	22(40.0)	2			
	Agree	19(21.1)	11(20.0)				
The workload in the unit is quite high	Disagree	8(8.9)	3(5.5)	1	0.534*		
	Agree	82(91.1)	52(94.5)				
The healthcare providers patient ratio is satisfactory	Disagree	69(76.7)	44(80.0)	1	0.221	0.685	
	Agree	21(23.3)	11(20.0)				
The hospital offers ethical education programs	Disagree	33(36.7)	26(47.3)		2.576	0.276	
	Neutral	45(50.0)	20(36.4)	2			
	Agree	12(13.3)	9(16.4)				
There are clear policies and guidelines on how to handle ethical issues in the department	Disagree	38(42.2)	20(36.4)		1.094	0.524	
	Neutral	36(40.0)	21(38.2)	2			
	Agree	16(17.8)	14(25.5)				
Ethical issues are hardly discussed in the department.	Disagree	34(37.8)	16(29.1)		1.727	0.422	
	Neutral	40(44.4)	25(45.5)	2			
	Agree	16(17.8)	14(25.5)				

\*Fischer' s exact test

#### **4.5 Predictors of moral distress among healthcare providers at KNH oncology department.**

Variables that were significant ( $p < 0.05$ ) under bivariate analysis were included into a multivariate model using binary logistic regression as shown in Table 13. The findings showed that participants with degree, (AOR =0.33, 95%CI:0.14 – 0.85,  $p = 0.001$ ), higher diploma, (AOR =0.22, 95%CI:0.10 – 0.49,  $p < 0.001$ ) and those with master's level education, (AOR =0.16, 95%CI:0.04 – 0.51,  $p = 0.010$ ) were less likely to have moral distress as compared to those with diploma level qualification.

Those who had  $\leq 2$  years duration of experience in oncology were 2.5 times more likely to have moral distress compared to those with more than two years' experience, AOR =2.50, 95%CI:1.91 – 6.41,  $p = 0.005$ . Those who were neutral on assertion that patients' relatives have unrealistic expectations about me were 76% less likely to have moral distress compared to those who disagreed with the statement, AOR =0.24, 95%CI:0.09 – 0.76,  $p = 0.015$ . Those who agreed with the statement that patients' relatives have unrealistic expectations about me were 3.88 times more likely to have moral distress, AOR =3.88, 95%CI:1.05 – 14.35,  $p = 0.042$ . Those who disagreed with the statement that there is autonomy in decision making were four times more likely to have moral distress, AOR =4.15, 95%CI: 1.16 – 14.81,  $p = 0.028$ .

Table 4.12: Determinants of moral distress among healthcare providers at KNH oncology department

<b>Factors</b>	<b>AOR(95%CI)</b>	<b>P-value</b>
<b>Level of education</b>		
Diploma	Ref	
Degree	0.33(0.14 - 0.85)	0.001
Higher diploma	0.22(0.10 - 0.49)	<0.001
Masters	0.16(0.04 - 0.51)	0.010
<b>Experience</b>		
≤2 years	2.50(1.91 - 6.41)	0.005
> 2 years	Ref	
<b>Training in oncology</b>		
Yes	7.13(0.91 - 55.94)	0.062
No		
Disagree	Ref	
Neutral	0.26(0.06 - 1.07)	0.061
Agree	0.65(0.19 - 2.26)	0.498
<b>Which age category of cancer patients</b>		
Paediatric	Ref	
Adults	9.70(0.33 - 28.11)	0.187
Both	10.69(0.41 - 32.11)	0.155
<b>Patients' relatives have unrealistic expectations about me</b>		
Disagree	Ref	
Neutral	0.24(0.09 - 0.76)	0.015
Agree	3.88(1.05 - 14.35)	0.042
<b>There is autonomy in decision making</b>		
Disagree	4.15(1.16 - 14.81)	0.028
Neutral	0.58(0.17 - 1.98)	0.382
Agree	Ref	

#### **4.6 The moral distress coping strategies among the healthcare providers working at the oncology department at KNH**

The moral distress coping strategies among healthcare providers in oncology department included sharing with colleague 74.5% (n =108), trying to forget 53.8% (n =78), reflective and debriefing discussions 52.4% (n =76) and ignoring distressing situations 41.4% (n =60) as shown in Table 4.13.

Table 4.13 : The moral distress coping strategies among the healthcare providers working at the oncology department at KNH

<b>Coping strategies</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>
Outrage	113(77.9)	0	32(22.1)
Self-doubt	93(64.1)	0	52(35.9)
Distancing from the patient	91(62.8)	5(3.4)	49(33.8)
Ignoring distressing situations	81(55.9)	4(2.8)	60(41.4)
Reflective and debriefing discussions	65(44.8)	4(2.8)	76(52.4)
Absenteeism from work or duty	129(89.0)	4(2.8)	12(8.3)
Quitting the profession or changing work department	131(90.3)	0	14(9.7)
Breaking the administrative rules	118(81.4)	1(0.7)	26(17.9)
Trying to forget it	65(44.8)	2(1.4)	78(53.8)
Sharing with colleague	28(19.3)	9(6.2)	108(74.5)
Transferring duties to someone else	83(57.2)	17(11.7)	45(31.0)
Reporting to higher authorities	67(46.2)	22(15.2)	56(38.6)
Praying	44(30.3)	59(40.7)	42(29.0)

## **CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Discussions**

#### **5.1.1 Demographic characteristics of healthcare providers in oncology department**

The present study sought to establish the determinants of moral distress among healthcare workers in the oncology department. The present study established that 56.6% of the healthcare providers were male. These findings are consistent with those from other studies (Ameri et al., 2016) (Guariglia et al., 2023)(Okamura et al., 2023). The work life balance needed in healthcare setting makes it difficult for majority of men making it difficult pursue careers as healthcare workers. In addition, data in the present study was collected consecutively which could impact on the distribution of the study participants.

Almost half of the participants in the present study were aged between 41 and 50 years. These findings are comparable to those from previous studies Okamura et al. (2023) and Sommerlatte et al., (2023). Okamura et al. (2013) found that the average age was 41 years while Sommerlatte et al., (2023) which revealed that the average age of healthcare providers working in the oncology department was 43.7 years. The observation that many nurses working in oncology departments are aged between 40 to 50 years can be attributed to a combination of factors related to both personal and professional aspects. Nursing is often seen as a lifelong career, with many nurses gradually advancing through different roles and specializations. The age range of 40 to 50 years is a stage where nurses may have gained substantial experience in general nursing practice and

have progressed to specialized areas like oncology (Okamura et al., 2023)s. This age range is a time when nurses are likely to hold mid to senior-level positions, including roles with greater responsibilities and expertise in oncology nursing.

### **5.1.2 Level of moral distress**

The current study displayed that 62.1% of healthcare workers had moral distress with 49% having mild moral distress while 13.1% had severe moral distress. These findings is consistent with those from a study in United States established that 67% of the healthcare workers had moral distress with majority of healthcare providers having mild moral distress (Davidson et al., 2016). A study done in Germany also disclosed that 67% of the healthcare workers in oncology unit had high moral distress (Mehlis et al.,2018). Similarly, another study conducted in Kenya at MTRH revealed that 55.9% of the healthcare providers had moral distress with staff shortage and nurse-physician conflicts being the common indication for high moral distress (Gitonga & Leonard.,2017).

The present findings were lower compared to a study in Italy which found that 86% of the healthcare providers working in the oncology department had moral distress (Lazzarin, Biondi & Mauro,2014). A study carried out among doctors working with cancer patients at National Cancer Institute, Sri Lanka, indicated that moral distress among the healthcare providers taking care of cancer patients was high scoring 91.2% (Amjed et,2019). Due to limited training in cancer diagnosis and treatment, a shortage of diagnostic pathologists, and expensive diagnostic testing, 80% of cancer patients in sub-Saharan Africa present late at diagnosis, causing moral distress for healthcare

providers. The variation in the levels of moral distress could be attributed to diverse factors. Oncology care often involves making difficult treatment decisions that can significantly impact patients' lives (Martins et al., 2020). Healthcare providers may go through moral distress when they have to make choices that align with medical guidelines but conflict with their personal values or the preferences of patients and their families.

### **5.1.3 The relationship between health care provider individual factors and moral distress among healthcare providers at MTRH oncology department**

The present findings showed that level of education among healthcare providers was associated with moral distress. Those who had degree, higher diploma and masters were less likely to experience moral distress as compared to those who had diploma. These findings are comparable to those from previous studies (Shereen and Hanan 2017; Ameri et al., 2016). Shereen and Hanan (2017) who stated that healthcare provider qualification influence their ability to deal with challenges within the oncology unit which results into increased moral distress. Similarly, another study in Tehran by Ameri et al. (2016) found that healthcare providers with low level education had increased risk of moral distress. These findings have illustrated that higher education provided individuals with a more comprehensive understanding of ethical principles, moral reasoning, and critical thinking skills.

The study established that those who had  $\leq 2$  years of experience were three times more likely to have moral distress. These findings are comparable to Borhani et al. (2015) who found that number of years working were significantly associated with moral

distress where those who had worked for few years were found to be more likely to have moral distress. Working in oncology unit is not easy considering the psychological and emotional needs and skillset required to navigate through these challenges. Similar findings are also echoed by Lievrouw et al. (2016) who asserted that younger healthcare professionals experience high moral distress due to limited level of experience. Oncology care often involves ethically complex situations such as end-of-life decisions, aggressive treatment options, and discussions about palliative care. Healthcare providers who are new to the field might struggle to navigate these situations, leading to heightened moral distress as they grapple with conflicting values and patient preferences.

However, the present findings contrast those from Michela et al. (2014) whose study showed no significant association between moral distress and healthcare worker demographic characteristics. The absence of a significant association between moral distress and healthcare worker demographic characteristics might stem from several reasons related to the complexity of moral distress and its relationship with various factors. Moral distress is an emotional response to ethical challenges and dilemmas in healthcare, which can be universal regardless of demographic characteristics. Healthcare workers, regardless of their age, gender, ethnicity, or other demographic factors, can all experience moral distress when faced with difficult decisions or situations that challenge their values.

#### **5.1.4 The relationship between patient factors and moral distress among healthcare providers at KNH oncology department**

Patient related factors associated with moral distress among healthcare providers were also investigated in the present study. The findings from present study showed that healthcare providers who were dealing with adult patients had high level of moral distress. These findings align with those from Lievrouw et al. (2016) which found that dealing with adult oncology patients is hectic and difficult which increase the risk of moral distress among healthcare workers. Another study by Guariglia et al. (2023) also found that the nature of patients and severity of the disease impact on patient moral distress levels. Dealing with adult oncology patients can be incredibly demanding and emotionally challenging for healthcare workers, which can certainly contribute to an increased risk of moral distress. Adult oncology care often involves delivering life-changing diagnoses and discussing treatment options with patients. Communicating such serious and often life-threatening news can be emotionally overwhelming for both patients and healthcare workers. The responsibility of conveying sensitive information while maintaining empathy can lead to moral distress.

Patients and their relatives also present with highly unrealistic expectations which negatively influence the moral and healthcare provider wellbeing. The pressure from patients and their relatives with regards to making care decisions put healthcare workers at a crossroad in decision making. One of the ethical difficulties that has been linked to feelings of moral anguish among healthcare professionals is the manner in which information is provided to cancer patients. Cancer patients typically undergo a number of studies, each of which calls for the patient and their significant others to give their

agreement after being fully informed. According to Vargas (2019), the patients' inability to obtain proper information regarding their diagnosis or care plan affects both the patients' moral anguish and their level of suffering. One of the most significant moral challenges that medical professionals face is grappling with the temptation to withhold honest communication from patients and the people closest to them. It makes matters even more problematic when members of the family have trouble understanding the material. As a consequence of this, the patient's autonomy in decision-making may be jeopardized if the information is not presented in an appropriate manner, as the patient's preferences may not be considered (Isolina et al., 2018).

#### **5.1.5 The relationship between institutional factors and moral distress among healthcare providers at KNH oncology department.**

The present study established that having autonomy in decision making was markedly associated with high occurrence of moral distress among healthcare workers. Those who had autonomy no autonomy at workplace were associated with higher moral distress. This report is consistent with those from Lamiani et al. (2017) who stated that psychological empowerment and autonomy in decision making were significant factors associated with moral distress. Healthcare providers who had low level of autonomy were more likely to have increased risk of moral distress.

The current study did not show any significant association between workload and moral distress among healthcare providers. This however, is contrary to most of the previous studies who found that workload was one of the major factors associated with increased moral distress (Sandeberg et al., 2020; Vargas,2019; Shereen & Hanan,

2017). The findings from Sandeberg et al. (2020) established that oncology patients require comprehensive care and thus working with a higher patient to healthcare provider ratio plays a notable role in increasing the risk of moral distress. Similarly, Vargas (2019) stated that inadequate staff within the oncology department increases workload to the existing care providers which is positively associated with moral distress. Thus, even though workload is a major factor associated with moral distress, there is a likelihood of healthcare providers adopting better coping strategies which improve their commitment and lower the level of distress. Healthcare providers who have developed effective coping mechanisms and stress-management strategies might be able to handle high workloads without experiencing significant moral distress. Their ability to prioritize tasks, manage time efficiently, and maintain a work-life balance can mitigate the negative impact of workload on their emotional well-being.

#### **5.1.6 Moral distress coping strategies among the healthcare providers working at the oncology department at KNH.**

Healthcare providers working in oncology departments often face significant moral distress due to the complex and emotionally charged nature of their work. Coping strategies are crucial for managing and mitigating the impact of moral distress on their well-being. Our study established that the commonly used coping strategies included sharing with colleagues, trying to forget, reflective and debriefing discussions as well as ignoring distressing situations. These findings are comparable to those from a study by Lievrouw., et al. (2016) who found that compromise and having discussions with colleagues were the commonly utilized coping strategies among oncology healthcare

providers. Corrado and Molinaro (2017) also stated that having reflective debriefing sessions was crucial in helping healthcare workers overcome moral distress.

Healthcare providers working in oncology departments often face significant moral distress due to the complex and emotionally charged nature of their work. Coping strategies are crucial for managing and mitigating the impact of moral distress on their well-being (Sandberg et al., 2021). Thus, it is vital for healthcare institutions to support healthcare providers in developing effective coping strategies by providing resources, training, and a supportive work environment. Regular debriefing sessions, access to counselling services, and creating a culture that acknowledges and addresses moral distress can contribute to the well-being of healthcare providers in oncology departments.

## **5.2 Conclusions**

The burden of moral distress among healthcare workers in oncology department is high (62.1%) with 49% having mild moral distress and 13.1% having severe moral distress.

Level of education and years of experience were individual related factors associated with moral distress.

Working with adult patients was a significant patient related factor that was associated with high moral distress.

Lack of autonomy in decision making among healthcare providers was significantly associated with high moral distress.

However, the common moral distress coping strategies that were put in place include sharing with colleagues, trying to forget, reflective and debriefing discussions as well as ignoring distressing situations.

### **5.3 Recommendations**

The hospital to foster a culture of open communication where healthcare providers feel comfortable discussing moral distress and ethical challenges with colleagues, supervisors, and mentors.

The state with the help of the ministry of health need to implement wellness programs that focus on stress management, emotional resilience, and work-life balance.

The hospital should educate healthcare providers on the importance of self-care and provide resources for maintaining physical and emotional well-being.

The hospital should create an environment where healthcare providers feel valued, respected, and supported in their roles.

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## APPENDICES

### Appendix I : Informed Consent Form

#### KENYATTA UNIVERSITY

#### OFFICE OF THE CHAIRMAN ETHICS REVIEW COMMITTEE

My name is **Morine Mwenya** (Kenya University /I am a **Master student from Kenya University**). I am conducting a study titled "**Determinants of Moral Distress among Healthcare providers working in Oncology Department at Kenya National Hospital**" This study aims to describe the determinants of moral distress among healthcare providers working in the oncology department at Kenya National Hospital.

#### **A. Procedures to be followed**

Participation in this study will require that I ask you some questions from the questionnaire that I will be using as a tool to collect information regarding the research. I will give you a structured self-administered questionnaire to fill. It will contain three main sections. Section A will comprise of your demographic data, section B will comprise of Moral Distress Scale -Revised tool to help collect data on the intensity and frequency of moral distress and the last section C will comprise of questions regarding how you cope with moral distress as you render services to the patients. The questionnaire will be collected and kept secure for analysis as soon as you complete filling.

**B. Voluntarism**

You have the right to refuse participation in this study. You will get the same services and care whether you agree to join the study or not and your decision will not change the care you will receive. Please remember the participation in this study is voluntarily. You may ask questions related to the study at any time.

You may refuse to respond to any questions and you may stop an interview at any time. You may also stop being in the study at any time without any consequences to the services you receive here or any other organization now or in the future.

**C. Discomforts and Risks**

Due to the presence of Covid -19 globally, all measures will be put in place to ensure that you do not contract the disease as you participate in the study. The interview may take approximately half to one hour. You will be free to opt out of the study participation any time.

**D. Benefits**

If you participate in this study, you will help us to learn how to provide effective measures that can improve the working conditions in relation to moral distress encountered by increasing the HCPs' awareness towards MD. This will help us identify factors that contribute to moral distress and how they can be prevented or handled.

**E. Reward**

There will be no rewards or any payment to you if you participate.

### **F. Confidentiality**

The interviews will be conducted in a private setting within the hospital. Your name will not be recorded on the questionnaire. The questionnaires will be kept in a locked cabinet for safe keeping at Kenyatta University. Everything will be kept private and only shared with the study team.

### **G. Contact Information**

If you have questions about the study, call my supervisors: Dr. Grace Githemo on the mobile number 0722787862 or Dr. Mourice Kodhiambo on 0724468162. You can also contact me, the main investigator on 0796355092.

However, if you have questions about your rights as a study participant: You may contact Kenyatta University Ethical Review Committee Secretariat on [chairman.kuerc@ku.ac.ke](mailto:chairman.kuerc@ku.ac.ke), [secretary.kuerc@ku.ac.ke](mailto:secretary.kuerc@ku.ac.ke),

### **H. Participant' s statement**

The above information regarding my participation in the study is clear to me. The study has been explained to me and I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will still get the same care and medical treatment whether I decide to leave the study or not and my decision will not change the

care that I will receive from the clinic today or that I will get from any other clinic at any other time.

Name of Participant.....

\_\_\_\_\_

Signature or Thumbprint

Date

\_\_\_\_\_

Name of Representative/Witness (where necessary)

Relationship to Subject

## **Appendix II: Adhering To Covid 19 Pandemic**

This appendix on Covid -19 will cover safety measures and precautions that will be put in place during data collection process as per the Covid-19 containment, mitigation and management strategies in Kenya. The Covid-19 containment measures will be used during data collection to mitigate spread of the Covid-19 disease. This applies to the study since it will guarantee safety to the study participants by preventing spread of infection should one be found sick.

Given the highly infectious nature of SARS-Cov-2 and the rapidly changing circumstances around COVID-19 containment, mitigation and management strategies in Kenya, the priority for all study activities should be to uphold public health obligations, and continue care of the research participants while guaranteeing the safety for the participants, the research team, and the general public. Being the principal investigator, I will ensure that I adhere to COVID-19 related public health directives by:

1. Remaining aware of, and abiding by all applicable COVID-19 related public health directives, policies and recommendations as issued by the World Health Organization, Ministry of Health or other Kenyan government agencies on what to do in case I encounter participants reporting **possible COVID-19 exposure or symptoms during a study visit** or those particularly vulnerable to COVID-19 disease.
2. All study participants will be explained to the importance of abiding to the Covid 19 guidelines

3. All participants will be screened for covid for key defining symptoms of Covid 19 before carrying out the face to face interview. (fever, cough, and shortness of breath)
4. Participants with possible exposure or symptoms suggestive of a respiratory disease will not take part in the face to face interview but instead will immediately be referred to the Ministry of Health for further diagnostic procedures and possible isolation, as necessary.
5. All those study participants withheld from taking part in the research study will be explained to the reasons
6. At the site of the face-to-face interview, appropriate infection prevention control measures will be ensured as follows:
  - i. Temperature checks will be carried out for all study participants ..
  - ii. Hand-washing station and hand sanitizers for all to use will be availed.
  - iii. Avail 3-ply face masks for participants and research staff to use during the face-to-face interactions
  - iv. Physical distancing of minimum 1.5 metres in the waiting room and procedure rooms will be maintained.

### Appendix III: Questionnaire

#### Instructions

Prior to filling the questionnaire, you are encouraged to scan through the document and seek clarification where you do not understand from the researcher. Second, sign the consent form before proceeding to fill the questionnaire. You are not required to write your name on the questionnaire. Each questionnaire will be assigned a serial number for confidentiality. Please answer all the questions in all the sections provided on the questionnaire. You should provide your response by ticking according by either a tick or an X.

#### SECTION A

##### Socio -Demographic Data for Healthcare providers Questionnaire

A. Serial No -----                      B. Gender: Female [ ]                      Male [ ]

C .What is your age in years

20- 24 [ ]

35-39 [ ]

50-54 [ ]

25-29 [ ]

40-44 [ ]

55-59 [ ]

30-34 [ ]

45-49 [ ]

Above 60 years

**D .Indicate your marital status**

Married [ ]

Divorced [ ]

Single [ ]

Widowed/Widower [ ]

**E. Tick your profession**

Professor [ ]

Medical Officers [ ]

Nurses [ ]

Consultants [ ]

Clinical Officers [ ]

Radiologists [ ]

Registrars [ ]

**F. Tick the Level of Education**

Certificate [ ]

Higher diploma [ ]

Masters [ ]

Diploma [ ]

Degree [ ]

Others specify-----  
---**G. Do you have a specialty in oncology? [Yes] [No]****H. Years you have worked in oncology department?**

Below 1 year [ ]

11-15 years [ ]

1-5 years [ ]

16-20 years [ ]

6 -10years [ ]

Above 20 years [ ]

**I. Your department of work**

Radiotherapy [ ]

Chemotherapy centers [ ]

Cancer treatment clinic [ ]

Adults wards [ ]

Pediatric wards [ ]

Palliative care [ ]

**J. Attended ethical education workshops**    Yes [ ]    No [ ]

**K. How many patients are you allocated to take care of daily? -----**







**Interpretation of Likart Scale In Table 3 (MD Intensity)**

<b>Likart Scale</b>	<b>Interpretation</b>
0	Never
1	Rarely
2	Occasionally
3	Frequently
4	Very frequently

**Table 6: Shows Likart scale for moral distress frequency**

**SECTION C: The Coping Strategies among the HCPs working in Oncology department.**

How do you cope with the moral distress? Tick where appropriate.

**Coping strategies of the HCP experiencing moral distress**

	<b>Coping strategy</b>	<b>YES=2</b>	<b>NO=1</b>
1	Outrage		
2	Self-doubt		
3	Distancing from the patient		
4	Ignoring distressing situations		
5	Reflective and debriefing discussions		
6	Absenteeism from work or duty		
7	Quitting the profession or changing work department		
8	Breaking the administrative rules		
9	Trying to forget it		
10	Sharing with colleague		
11	Transferring duties to someone else		
12	Reporting to higher authorities		

<b>13</b>	Others specify		
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### Appendix III: Curriculum Vitae

#### MORINE MWENYA NAMUMA

P.O BOX 1116 WEBUYE-50205

TEL:+254796355092 or +254783512902

Email:morinemwenya@gmail.com

#### CAREER OBJECTIVE

To work in a dynamic and challenging environment that provides the opportunity for personal growth and career advancement .To continue to grow in leadership and knowledge, excel in innovative clinical health field, interact and share ideas with members of the healthcare team and develop practical lasting solutions.

<b>ACADEMIC AND PROFESSIONAL QUALIFICATION</b>			
<b>Area of Learning</b>	<b>Institution</b>	<b>Year Obtained</b>	<b>Grade</b>
Masters degree in Oncology Nursing	Kenyatta University	2018 to Date	Ongoing
Bachelor of Science in Nursing	Catholic University of Eastern Africa	2010 to 2014	Pass
O' Level	Our Lady' s Girls Secondary School Kakuma	2002 to 2007	B-Minus

<b>PERFORMANCE COMPETENCE AND PERSONAL ATTRIBUTES</b>
<p><b>Job knowledge and Skills:</b></p> <ul style="list-style-type: none"> <li>❖ Ability to perform duties allocated and has the capacity to learn</li> <li>❖ Quick mastery of skills</li> </ul> <p><b>Initiative and attitude:</b></p>

- ❖ Self – guided resourceful and creative at work
- ❖ Interests in assignment and accepts delegation

**Time planning:**

- ❖ Reports to work regularly and on time
- ❖ Completes assignment on time

**Teamwork:**

- ❖ Makes and sustains effective and productive relationships with colleagues and the public
- ❖ Respectful in differing viewpoints
- ❖ Meets commitment to colleagues
- ❖ Communicates with the team members so that they know what is going on.
- ❖ Displays a cooperative attitude in the work place

**Communication:**

- ❖ Exchange information and ideas in an appropriate manner
- ❖ Expresses ideas and information in a clear manner supervisors, peers and customers on time.

**Discipline:**

- ❖ Complies with the policies and procedures of the institution and ensures honesty and integrity at work
- ❖ Adheres to supervisors instructions
- ❖ Ensures confidentiality at all time

**Leadership:-**

- ❖ Ability to guide and direct employees .
- ❖ Models ethical workplace behavior
- ❖ Orients new staffs and students

**Computers:-**

- ❖ Advanced with computer knowledge.

**Analysis:-**

- ❖ Good analytical and planning skills.

**My strong attributes:**

- ❖ Patient focused.
- ❖ Team player.
- ❖ Able to work under pressure and meet deadlines.

**WORKING EXPERIENCE****WORK EXPERIENCE:****M .P SHAH HOSPITAL: FEBRUARY 2019 TO DATE****Position: Nurse****Department: Theatre****Duties and Responsibilities**

1. Receiving patients in theatre for different surgeries.
2. Admitting and preparing day case patients for surgery
3. Nursing patients in Post Anesthesia Care Unit.
4. Discharging patients from the Post Anesthesia Care unit to the next level of management or home.
5. Doing Kemba Kaizen in theatre where you ensure all equipment plus machines are functional and addressing those that are not functioning.
6. Scrubbing for various types of surgeries.
7. Circulating during surgeries.
8. Receiving and handing over the patient' s report from one shift to the next.
9. Ensuring economical use of equipment and supplies.

10. Mentoring students during their clinical rotations in theatre.

### **Covid -19 Ward**

**Position: Nurse**

#### **Duties and Responsibilities.**

1. Receiving and admitting Covid-19 patients in the ward.
2. Taking comprehensive history of the patients and documenting.
3. Monitoring and charting the vital signs of the patients.
4. Monitoring and managing symptomatic conditions of the patients
5. Ensuring infection and prevention control protocols are followed.
6. Ensuring teamwork and effective communication during patient' s care.
7. Sharing health messages to patients to avoid cross infection
8. Administering drugs as prescribed by the doctor.
9. Reporting any signs and symptoms of respiratory distress and administering oxygen where necessary and or refer to the higher level of care unit such as ICU
10. Ensuring enough supplies hospital consumables.
11. Ensuring all the requested investigations are carried out.

**KENYATTA NATIONAL HOSPITAL: FROM JUNE 2016 TO JANUARY 2019****Maternity Theatre****Position: Locum Nurse****Duties and Responsibilities**

1. Receiving patients to theatre after confirming they are fit for the surgery, by ensuring all the requirements are met.
2. Scrubbing to assist in surgery.
3. Circulating during the surgery.
4. Participating in neonate' s resuscitation.
5. Close monitoring of patients in Post anesthesia care unit to rule out any abnormal vital signs
6. Conducting neonates' examination to rule out any abnormalities
7. Ensuring economical use of equipment and supplies.
8. Billing the services rendered to the patients using the fun-soft software.
9. Sharing of health messages to the patients.
10. Working as a team for the betterment of the patient care.
11. Advocating for the patients' care, services and safety.

**Department: Medical Surgical Ward (PRIVATE WING)****Duties and Responsibilities**

1. Receiving patients for admissions, welcoming them and escorting them to the bed.
2. Taking comprehensive patient history on admission and subsequent days.
3. Identifying patient' s needs and using the nursing process to initiate plan of care.
4. Responsible for holistic patient care, including physical, mental and social wellbeing.
5. Develop written care plans based on patient' s needs, monitor and evaluate effectiveness of interventions.
6. Document all assessment data and report the abnormal to the shift nurse in-charge and the primary doctor.
7. Assist patient with activities of daily living such as feeding, bathing, grooming and elimination.
8. Perform patient and family education and implement appropriate health messages.
9. Accept responsibilities delegated by the team leader or nurse in-charge.
10. Discharging patients from hospital after recovery or for palliative care continuity and emphasizing on the discharge instructions.
11. Assessing, planning, implementing and evaluating the patient care.
12. Preparing, administering and recording prescribed medications.

13. Monitoring patient' s vital signs and reporting adverse reactions to medications on occurrence.
14. Responding to any questions asked by the patients or the significant others regarding the care being rendered.
15. Maintaining and updating patient files, medical charts and health records.
16. Educating patients on the surgical procedures.
17. Consulting and coordinating with other members of the healthcare team in providing patient care.
18. Ensuring all the investigations requested by the doctors and done and results followed up as soon as possible to avoid prolonging patient' s hospital stay.
19. Recording all care information accurately and completely.
20. Change of dressings or catheters as instructed by the doctors.
21. Ensuring patients' safety at all time.
22. Adhering to infection and prevention control protocols.
23. Preparing patients for theatre.
24. Receiving patients from theatre and ensuring all the post-operative instructions are followed.
25. Ensuring economical use of equipment and supplies in the ward by doing accurately and timely billing of ward stock, medications and consumables.

26. Ensuring all the prescribed drugs are available for the patients.

## **B. Pediatric Department**

**Position: Locum Nurse**

### **Duties and Responsibilities**

1. Admitting and discharging patients as per the standard operating procedure.
2. Receiving and handing over report both written and verbally.
3. Participating in pediatric resuscitation
4. Rendering nursing services to patients.
5. Rendering nursing services to oncology patients including preparing them for different treatment modalities including surgery, chemotherapy and radiation.
6. Monitoring patients on chemotherapy treatment.
7. Managing post cancer treatment complications such as vomiting, diarrhea.
8. Assessing and identifying parents and patients who need counseling and escalating the issue to the palliative team for counseling sessions.
9. Preparing patients pre-operatively and taking them to theatre and rendering post operative services.
10. Giving health messages to the patients
11. Administration of blood and other blood products to the patients.

12. Ordering drugs for patients as prescribed on the treatment sheet
13. Billing patients using Funsoft software.
14. Ensuring infection and prevention protocols are adhered to.
15. Ensuring economical use of supplies and equipment in the hospital.
16. Working collaboratively with the team to render quality services to the patients.

### **C. Orthopedic Department**

#### **Position: Locum Nurse**

#### **Duties and Responsibilities**

1. Admission and discharge of patients.
2. Administration of fluid therapy, oxygen therapy to patients
3. Administration of all the nursing procedures and care to patients
4. Supervising students and junior staffs
5. Administrations of prescriptions/recommendations ordered by physicians including treatment
6. Dressing of patient' s wounds as instructed by the doctor.
7. Participating in infection and prevention control through preparing of decontamination solutions decontaminating equipment and hands hygiene
8. Practicing and maintaining confidentiality of patients information

9. Taking, recording and interpreting vital signs of patients and responding accordingly.
10. Develop nursing care plans for patients using holistic nursing care.
11. Order drugs per patient from pharmacy and ensure that all investigations needed are done.
12. Receive patients for surgery and review their preoperative care..
13. .Receive, write and give ward report.
12. Participating in patients counseling particularly cancer patients.
13. Billing all services rendered to patients using Funsoft software
14. Ensuring economical use of supplies and equipment by documenting every item used per

### **3. MAY 2015-MAY 2016: EMBU PROVINCIAL GENERAL HOSPITAL**

#### **Position: Nurse Intern**

#### **Duties and responsibilities:**

1. Admission and discharge of patients.
2. Administration of drugs to patients.
3. Administration of fluid therapy, oxygen therapy to patients
4. Administration of all the nursing procedures and care to patients
5. Supervising students and junior staffs including students on rotations
6. Administrations of prescriptions/recommendations ordered by physicians including

treatment

7. Dressing of wounds and changing of the dressings as instructed.
8. Participating in infection and prevention control through preparing of decontamination solutions decontaminating equipment and hands hygiene
9. Practicing and maintaining confidentiality of patients information
10. Take record and interpret vital signs.
11. Develop nursing care plans for patients using holistic nursing care.
12. Order drugs per patient from pharmacy and ensure that all investigations needed are done.
13. Participate in the resuscitation of patients.
14. Share health messages on sexually transmitted disease.
15. Receive patients for surgery and review their preoperative care.
16. Provide prevention of mother to child transmission (PMCT) to clients/patients.
17. Receive, write and give ward report.
18. Providing counseling and rendering of family planning services to mothers in the antenatal clinic. (ANC).
19. Giving immunizations to children and sharing health messages to the mothers.

**JANUARY 2015-APRIL 2015: KENYATTA NATIONAL HOSPITAL**

**Position: Nurse Intern**

**Duties and Responsibilities**

1. Admit discharge and transfer patients appropriately.
2. Take record and interpret vital signs.
3. Develop nursing care plans for patients using holistic nursing care.
4. Participate in the resuscitation of patients.
5. Share health messages on sexually transmitted disease.
6. Demonstrate skills on infection prevention.
7. Receive patients for surgery and review their preoperative care.
8. Prepare and perform emergency intervention e.g. cardiac resuscitation
9. Receive, write and give ward report
10. Provide nursing care plans on critically ill surgical/gynae-patients (both pre and post-operative).
11. Assist with counseling people of relatives of patients admitted to I.C.U.
12. Nursing patients in I.C.U ( Intensive Care Unit).
13. Scrubbing and circulating during surgeries in theatre.

**Achievements**

1. Did refresher course on Basic Life Support.

2. Participated in open heart workshop held at M.P Shah Hospital
3. Completed three research courses by Collaborative Institutional Training Initiative (CITI) in Bioethics and Human Subject Research and responsible Conduct research.
4. Completed a 3 months short course training in Biostatistics and Epidemiology under the HEPI-Program ( Health – Professional Education Partnership Initiative) Research Course

## **HOBBIES**

- Working with people
- Reading of inspirational books
- Listening to music and inspirational speech.
- Reading the Word of God
- Travelling
- Helping people
- Working with people

## **Referees**

<b>NAME</b>	<b>Bornface Nyamweya</b>	<b>Mrs Jane Chore</b>	<b>Pastor Lydia</b>	<b>JOHN MUSILI MALOMBE</b>
<b>ROLE</b>	Nurse	Chief assistant Chief Nurse	Assistant Pastor	Area Sales Manager
<b>ORGANIZATION</b>	MP Shah Hospital	,Kenyatta National Hospital, School of Nursing	Deliverance Church- Kayole	SBC Kenya Ltd
<b>TELEPHONE</b>	+254 707478329	+254 722792931	+254722884 044	+254 703695344
<b>EMAIL</b>	<u>nyamweyabon</u> <u>@gmail.com</u>	janechorejn@yahoo .com		

## Appendix IV: Research Authorization



KENYATTA UNIVERSITY  
GRADUATE SCHOOL

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

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

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

Our Ref: D50/CE/20229/2021

Date: 30<sup>th</sup> September 2025

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

Dear Sir/Madam,

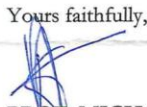
**REF: RESEARCH AUTHORIZATION FOR MAGHENDA NESTO KAVITA**  
**REG. D50/CE/20229/2021**

I write to introduce Maghenda Nesto Kavita who is a Postgraduate Student of this University. The student is registered for M.A. Degree programme in the **Department of Literature, Linguistics and Foreign Languages**

**Nesto intends** to conduct research for a M.A Project proposal entitled “**Syntactic Analysis of Kidawida Subordinate Clauses: A Systemic Functional Grammar Approach**”.

Any assistance given will be highly appreciated.

Yours faithfully,

  
**PROF. MICHAEL M. GICHERU**  
**EXECUTIVE DEAN, GRADUATE SCHOOL**

AM/kes

## Appendix V: Research Approval



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. 57530

Internal Memo

FROM: Executive Dean, Graduate School

DATE: 1<sup>ST</sup> October 2025

TO: Maghenda Nesto Kavita  
C/o Department of Literature, Linguistics  
And Foreign Languages

REF: D50/CE/20229/2021

**SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL TITLE**

This is to inform you that Graduate School Board, at its meeting of 25<sup>TH</sup> September 2025 approved your Research Project Proposal for the MA Degree Entitle, "Syntactic Analysis Of Kidawida Subordinate Clauses: A Systemic Functional Grammar Approach".

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 and Progress Report Forms per semester. The forms are available at the University's Website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your project before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.

**ANDREW MATE**  
**FOR: EXECUTIVE DEAN, GRADUATE SCHOOL**

C.c. Chairman, Department of Literature, Linguistics and Foreign Languages

Supervisors:

Dr. Eunice Nyamasyo  
Department of Literature, Linguistics and Foreign Languages  
**Kenyatta University**


AM/kes


*Transforming Higher Education... Enhancing Lives*  
Kenyatta University is ISO 9001:2015 Certified



Page 1 of 1

Appendix VI: Nacosti Permit


**REPUBLIC OF KENYA**  
 Ministry of Science, Technology and Innovation  
 National Commission for Science, Technology and Innovation


**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION**  
 Date of Issue: 13/May/2022

**Ref No: 00874**


**RESEARCH LICENSE**

This is to Certify that Miss. **MORINE NAWAS MWENYA** of Kenyatta University, has been licensed to conduct research in Nairobi on the topic: **DETERMINANTS OF MORAL DISTRESS AMONG HEALTHCARE PROVIDERS WORKING IN ONCOLOGY DEPARTMENT, KENYATTA NATIONAL HOSPITAL, NAIROBI COUNTY, KENYA** for the period ending: **13/May/2022**.

**License No: NACOSTI/R/22/1487**

**00874**  
**Applicant Identification Number**

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



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