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

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ABSTRACT

Background: *This study discusses the prevalence, causes and interrelationships of the causal factors and the coping mechanisms of the HCPs to moral distress in oncology departments.*

The purpose of the study*: 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. 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.*

Results: *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 ≤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.*

Conclusion and recommendations: *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.*

Key Words: *Moral Distress, Healthcare, Prevalence*

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BACKGROUND

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.

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 was 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.

Research Objectives

This study described the determinants of moral distress among healthcare providers working in the oncology department at Kenyatta National Hospital. The study was guided by the following specific objectives

- To assess the level of moral distress among healthcare providers working in oncology departments at KNH.
- To determine the relationship between health care provider individual factors and moral distress among healthcare providers at KNH oncology department.
- To establish the relationship between patient factors and moral distress among healthcare providers at KNH oncology department.
- To determine the relationship between institutional factors and moral distress among healthcare providers at KNH oncology department.
- To establish the moral distress coping strategies among the healthcare providers working at the oncology department at KNH.

LITERATURE REVIEW

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.

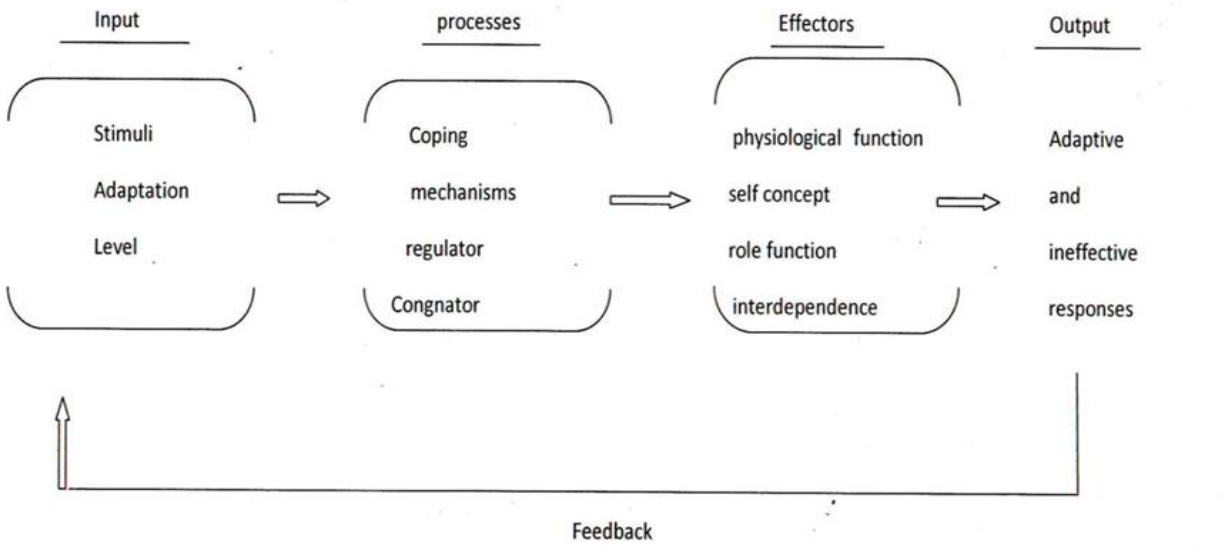


Figure 1: Roy's adaptation model theoretical framework

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

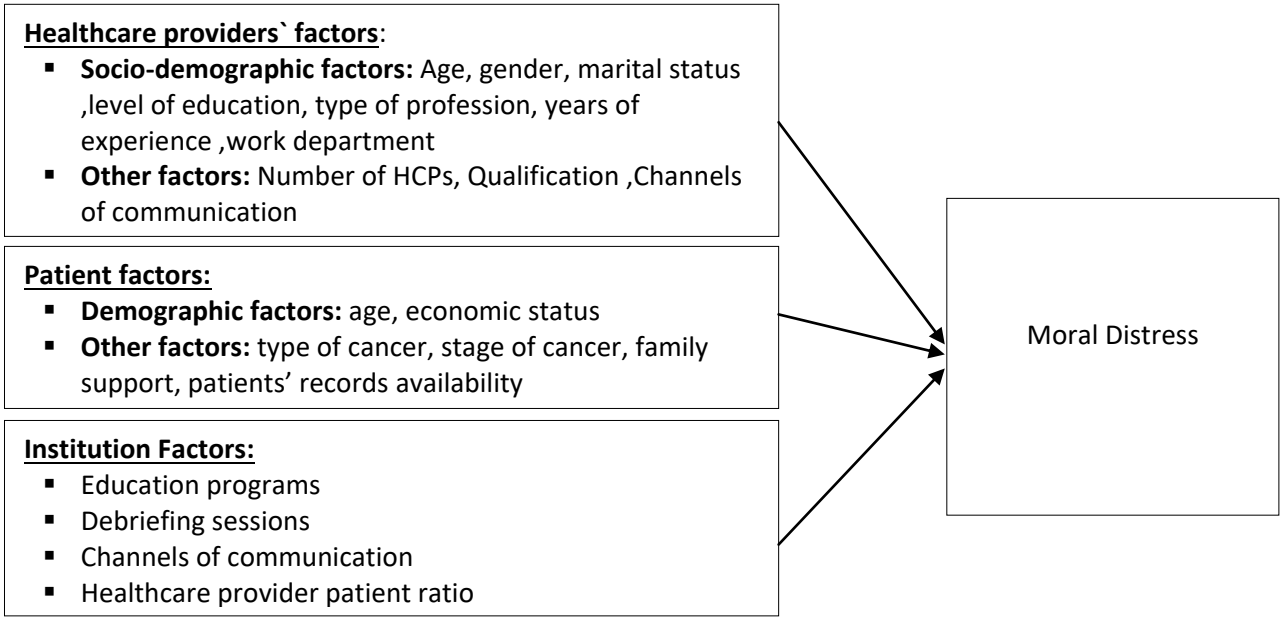
challenge, where a healthcare provider may or may not take into consideration the feelings of uneasiness. The compromised adaptation happens when the compensation level becomes insufficient in dealing with the uneasiness.

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.

Conceptual Framework



Independent Variables **Dependent Variable**

Figure 2: Conceptual Framework

VARIABLES REVIEW

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).

Factors that Cause Moral Distress Among Healthcare Providers Working in Oncology Units

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'Connnell,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'Connnell, 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).

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).

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).

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.

METHODOLOGY

This study employed a correlational cross sectional study design using quantitative approach. 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 had 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 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 and medical officers. The sample of the population of 145 was calculated by Andrew Fischer calculation formula. This research applied stratified proportionate random sampling method to identify study participants from the study population.

Data was collected using a structured, self-administered questionnaire, comprising of three main sections, namely the socio-demographic section, the Revised Moral Distress Scale and moral distress coping strategies. Structured self-administered questionnaire was used in 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, was used as a tool to measure the level of moral distress.

RESULTS

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.

Descriptive findings of the study participants

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 1.

Table 1: Individual related characteristics of healthcare providers working in the oncology department at Kenyatta National Hospital

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

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 2.

Table 2: Workplace related characteristics among healthcare provider at the oncology department at Kenyatta National Hospital

Healthcare provider workplace	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
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)

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 3.

Table 3: Patient factors influencing healthcare workers working in the oncology department at Kenyatta National Hospital

Patient factors	Frequency	Percent
Patients allocated daily (Mean ±SD)	14±6	
Age category of patients		
Paediatric	24	16.6
Adults	104	71.7
Both paediatric and adults	13	9.0
Cancer stage		
Stage 1	22	15.2
Stage 2	43	29.7
Stage 3	58	40.0
Stage 4	22	15.2
Common social challenges experienced		
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

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.

Table 4: 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)

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 5.

Table 5: Institutional factors affecting healthcare providers working in the oncology department at Kenyatta National Hospital

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

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 6.

Table 6: 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)

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 7.

Table 7: 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				

Level of moral of distress among healthcare providers

The level of moral distress was calculated based on the obtained scores where a score of ≥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 3.

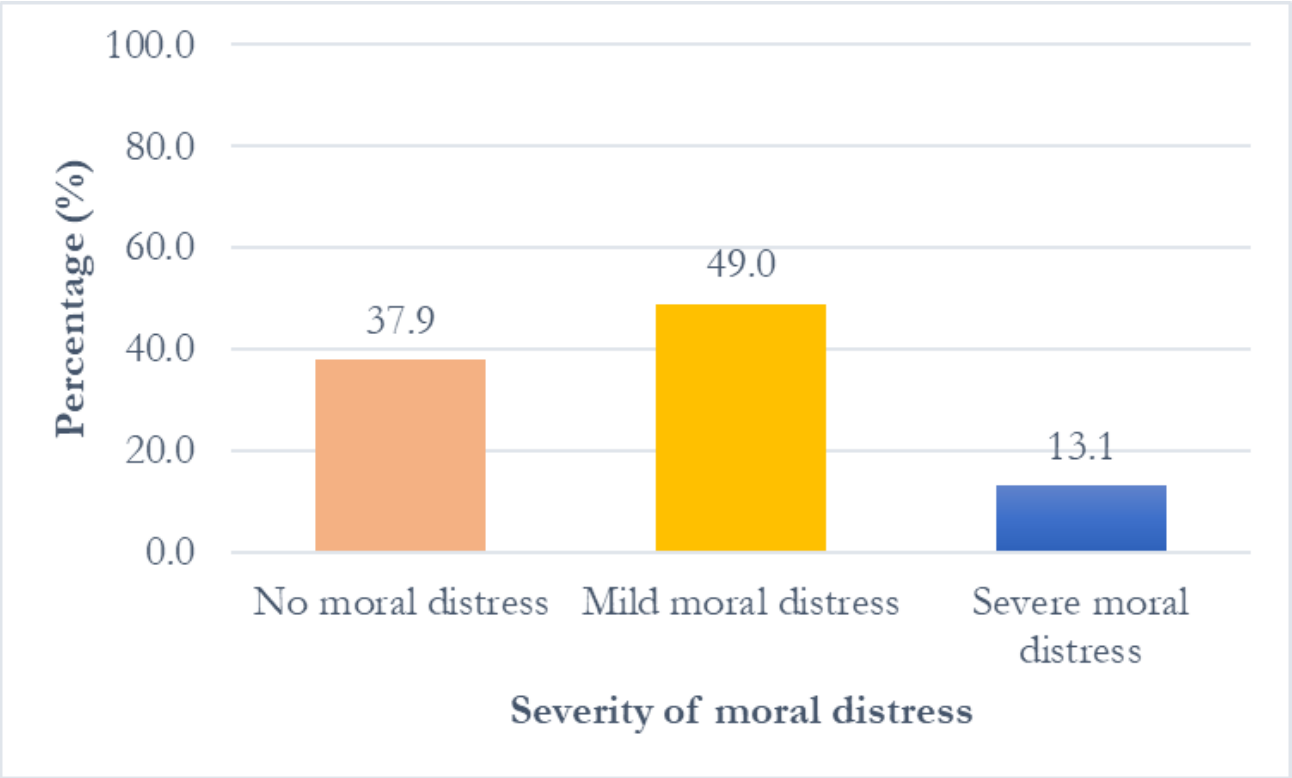


Figure 2: Level of moral distress

Bivariable analysis

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 8. The findings showed that the proportion of moral distress was higher among those with diploma and undergraduate degree qualification ((χ^2) (3) = 19.87, p<0.001). Among cadres, the proportion of moral distress was higher among nurses and medical officers ((χ^2)(4) = 11.52, p=0.021). Moral distress was higher among those with working experience of ≤2 years ((χ^2)(1) = 3.482, p =0.045). The proportion of moral distress was higher among those who did not have oncology training ((χ^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 (χ^2) (2) = 5.708, p=0.017) as shown in Table 8.

Table 8: The association between health care provider individual factors and moral distress among healthcare providers at KNH oncology department.

Health provider factors		Moral distress Present n(%)	Absent n(%)	df	χ^2	p-value
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)			
	31 - 40 years	5(5.6)	10(18.2)	3	6.868	0.076
	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)			
	Degree	56(62.2)	22(40.0)			
	Higher diploma	11(12.2)	7(12.7)	3		<0.001*
	Masters	2(2.2)	14(25.5)			
Cadre	Registrar	14(15.6)	16(29.1)			
	Consultant	3(3.3)	0			
	Nurse	55(61.1)	35(63.6)	4		0.021*
	Medical officers	18(20.0)	3(5.5)			
	Radiologist	0	1(1.8)			
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 supportive	Disagree	4(4.4)	0			
	Neutral	12(13.3)	4(7.3)	2		0.134*
	Agree	74(82.2)	51(92.7)			
The channels of communication with other healthcare providers are open	Disagree	5(5.6)	2(3.6)			
	Neutral	19(21.1)	8(14.5)	2		0.504*
	Agree	66(73.3)	45(81.8)			
There is poor interpersonal collaboration in the department	Disagree	40(44.4)	14(25.5)			
	Neutral	39(43.3)	29(52.7)	2	5.708	0.017
	Agree	11(12.2)	12(21.8)			
Ethical issues are collaboratively discussed in the department	Disagree	11(12.2)	3(5.5)			
	Neutral	26(28.9)	12(21.8)	2		0.071*
	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)			
	Neutral	42(46.7)	17(30.9)	2	3.853	0.146
	Agree	34(37.8)	29(52.7)			
There is teamwork among the healthcare providers	Disagree	36(40.0)	18(32.7)			
	Neutral	29(32.2)	13(23.6)	2	3.894	0.143
	Agree	25(27.8)	24(43.6)			

*Fischer's exact test

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 (χ^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 (χ^2) (2) = 13.164, p=0.001 as showed in Table 9.

Table 9: The association between patient factors and moral distress among healthcare providers at KNH oncology department

		Moral distress				
Patient factors		**Present n(%)**	**Absent n(%)**	**Df**	**χ^2**	**p-value**
Which age category of cancer patients	Paediatric	12(13.6)	12(22.6)			
	Adults	64(72.7)	40(75.5)	2		0.019*
	Both	12(13.6)	1(1.9)			
Which is the most common cancer stage	Stage 1	12(13.3)	10(18.2)			
	Stage 2	25(27.8)	18(32.7)	3	1.493	0.684
	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)			
	Neutral	6(6.7)	5(9.1)	2	2.554	0.279
	Agree	46(51.1)	34(61.8)			
There is open communication with patients about their progress	Disagree	7(7.8)	3(5.5)			
	Neutral	18(20.0)	9(16.4)	2		0.714*
	Agree	65(72.2)	43(78.2)			
There is proper control of pain among the patients	Disagree	11(12.2)	8(14.5)			
	Neutral	21(23.3)	8(14.5)	2	1.672	0.433
	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)			
	Neutral	16(171.8)	8(14.5)	2	1.793	0.408
	Agree	34(37.8)	27(49.1)			
I experience unrealistic expectations from patients	Disagree	23(25.6)	8(14.5)			
	Neutral	17(18.9)	12(21.8)	2	2.462	0.292
	Agree	50(55.6)	35(63.6)			
Patients' relatives have unrealistic expectations about me	Disagree	7(7.8)	15(27.3)			
	Neutral	37(41.1)	11(20.0)	2	13.164	0.001
	Agree	46(51.1)	29(52.7)			

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 10. The findings showed that there was significant association between presence of autonomy in decision making and moral distress, (χ^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 10: The association between institutional factors and moral distress among healthcare providers at KNH oncology department

		Moral distress				
Institutional factors		**Present n(%)**	**Absent n(%)**	**Df**	**χ^2**	**P-value**
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)			
	Ward In charge	33(36.7)	17(30.9)	3		0.295*
	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)			
	Neutral	18(20.0)	22(40.0)	2	7.325	0.026
	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)			
	Neutral	45(50.0)	20(36.4)	2	2.576	0.276
	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)			
	Neutral	36(40.0)	21(38.2)	2	1.094	0.524
	Agree	16(17.8)	14(25.5)			
Ethical issues are hardly discussed in the department.	Disagree	34(37.8)	16(29.1)			
	Neutral	40(44.4)	25(45.5)	2	1..727	0.422
	Agree	16(17.8)	14(25.5)			

*Fischer's exact test

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 11. 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 have moral distress as compared to those with diploma level qualification.

Those who had ≤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 11: Determinants of moral distress among healthcare providers at KNH oncology department

Factors	AOR(95%CI)	P-value
Level of education		
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
Experience		
≤2 years	2.50(1.91 - 6.41)	0.005
> 2 years	Ref	
Training in oncology		
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
Which age category of cancer patients		
Paediatric	Ref	
Adults	9.70(0.33 - 28.11)	0.187
Both	10.69(0.41 - 32.11)	0.155
Patients' relatives have unrealistic expectations about me		
Disagree	Ref	
Neutral	0.24(0.09 - 0.76)	0.015
Agree	3.88(1.05 - 14.35)	0.042
There is autonomy in decision making		
Disagree	4.15(1.16 - 14.81)	0.028
Neutral	0.58(0.17 - 1.98)	0.382
Agree	Ref	

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 12.

Table 12: The moral distress coping strategies among the healthcare providers working at the oncology department at KNH

Coping strategies	Disagree	Neutral	Agree
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)

DISCUSSION

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.

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.

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 ≤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.

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).

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.

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.

CONCLUSION

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.

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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