ANXIETY AND DEPRESSION, AND THE COPING STRATEGIES AMONG CLOSE RELATIVES OF PATIENTS IN CRITICAL CARE UNITS AT KENYATTA NATIONAL HOSPITAL

BY

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DECLARATION

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

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DEDICATION

I dedicate this work to my children, Rajab Waliaula and Rania Rajab, for being my inspiration to always strive to be better.

This work is also dedicated to all those who have loved ones admitted to Critical Care Units and experience Anxiety and Depression due to this unfortunate occurrence. May the Lord give you strength during those very trying times.

LIST OF ABBREVIATIONS

DSM-V	Diagnostic and Statistical Manual of Mental disorders, fifth edition
F-COPES	Family Crisis Oriented Personal Scale
HADS	Hospital Anxiety and Depression Scale
HADS-A	Hospital Anxiety and Depression Scale-Anxiety
HADS-D	Hospital Anxiety and Depression Scale-Depression
ICU	Intensive Care Unit
KNH	Kenyatta National Hospital
KNH/UON ERC	Kenyatta National Hospital/ University of Nairobi Ethics Research Committee
NICE	National Institute for Health and Care Excellence
PICS-F	Post-intensive-care-syndrome family
PICU	Pediatric Intensive Care Unit
WHO	World Health Organization
COVID 19	Coronavirus Disease 2019

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OPERATIONAL DEFINITIONS

ICU patients in this study included patients admitted to the critical care units at KNH and were undergoing care while in the units.

Close relatives in this study included first degree relatives to the patient who would be affected most by having a loved one admitted to ICU. In this case, relatives were limited to: Parents; Spouses; Siblings above the age of 18 years; Children above the age of 18 years.

Emotional distress in this study referred to Anxiety and Depression.

ABSTRACT

Introduction

Family members play a major role in patients' health. More than 50% of incapacitated people partly depend on family caregivers for support and informal care. When a family member is admitted to the critical care unit, it causes significant strain to the family. Of all relatives with patients admitted in a hospital, those with patients admitted to a critical care unit have been shown to suffer most. The hospitalization period has been noted to be a traumatic event as it can potentially bring about mental stress that could interfere with the psychological wellbeing among family members.

Depression and Anxiety have been documented as the most common psychological symptoms that manifest in relatives of critically ill patients. It is also noted that healthcare professionals have for a long time failed to anticipate the needs of relatives with patients in ICU who are usually affected differently depending on how their needs were met by healthcare professionals.

Study Objective

This study aimed to find out anxiety and depression levels among relatives with patients admitted to ICU at Kenyatta National Hospital.
The study also aimed to find out the coping mechanisms used by family members during the time they had a loved one being treated in the ICU.

Study Design

The study used a cross-sectional descriptive design. The Hospital Anxiety and Depression scale (HADS) and the Family Crisis Oriented Personal Scale (F-COPES) were used to collect data from consenting adults who met the inclusion criteria.
The study used a census sampling method as the population to be studied was small. The study was conducted for a period of two months, and all relatives who were eligible for the study were included. A sample size of 239 was achieved.

Data Analysis

SPSS version 23 was used to analyze data using univariate, bivariate and multivariate tests. Descriptive statistics including frequency count, mean, standard deviation and percentage were used to describe the sample characteristics, level of anxiety and depression and the coping strategies used. One-way ANOVA and t-test were used to test the differences amongst the different groups. The data was then presented in form of narratives, charts, tables and diagrams.

The study found that male(50.2%) and female(49.8%) participants were essentially equal. Majority of the respondents were between 30-49 years, married (86.2%) and had tertiary level of education (83.7%). 91% of the participants suffered some form of anxiety while 55% had depression. Seeking spiritual support was the predominantly used coping mechanism among the participants.

The results of this study show that relatives of patients admitted to ICU suffer significant levels of anxiety and depression and there is need for them to be offered specialized psychological care at the time their loved ones are in ICU and beyond. Information from this study will help influence policy on how best KNH should plan to cater for the mental wellbeing of relatives who have loved ones admitted to ICU.

CHAPTER ONE

1.1 Introduction and Background

The Diagnostic and Statistical Manual of Mental disorders, fifth edition (DSM-V) defines depressive disorder as the existence of sad, empty or irritable mood, associated with somatic and cognitive changes, which markedly hinder a person's ability to function. As of 2015, 4.4% of the global population was estimated to have depression as reported by the World Health Organization (WHO). This implies that over 300 million individuals have depression.

Anxiety disorders are defined in DSM-V as disorders that share features of excess fear and anxiety with related behavioral disturbances. 3.6% of the global population was estimated to have anxiety disorder as of 2015, according to WHO. This translated to over 260 million people living with anxiety. Coping is defined as efforts that one uses to manage a stressful situation, both cognitive and behavioral (Chui, 2007).

Family caregivers play a significant role in patients' health (Amirez, 2017). At least 55% of incapacitated people depend partly on family members for support and informal care (Paraponaris, 2012). A family caregiver is a person who helps a patient to cope with an illness by offering financial support, help with daily living, personal care, emotional availability and social support (Finocchiaro, 2012) .

Patients and relatives alike experience significant anxiety and depression around the time the patient is admitted to the critical care unit (ICU) (Dharmalingam, 2016).The author reports that ICU has been identified among the places where family members suffer the most in a hospital. Paparrigopoulos as cited in (Dharmalingam, 2016) noted the hospitalization period to be a traumatic event because it can potentially trigger mental stressors that could harm the psychological wellbeing of the patient and family

members. Recovery process from critical illness is a lengthy affair and it's not without complications, this predisposes family members to adverse physical and psychological outcomes (Choi, 2016). Sources of stress during this period include the critical illness, the strange ICU environment, the burden to be present in ICU and other family responsibilities which take a strain on family caregivers coping abilities (Nelms, 2010).

Depressive and anxiety symptoms are the most common psychological symptoms that manifest in relatives of a critically ill patient in the acute phase (Choi, 2016). The author noted that family members take part in delicate decision making on behalf of the patient including end-of-life decision-making which affects them psychologically in the long-term. The duration of the disease and the patient's level of function are significant in determining the relatives' psychological well-being (Finocchiaro, 2012) Unfortunately, family members' general well-being is often overlooked as most attention is given to the patient (Finocchiaro, 2012).

Healthcare professionals have for a long time failed to correctly anticipate the needs of ICU relatives (Davidson, 2009). The author points out that family members are prone to undergo feelings of fear, anxiety, depression and posttraumatic stress because of the ICU experience. Davidson also noted that each family member is affected differently depending on how healthcare professionals meet their needs.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Sudden critical illness leads to a disruption in life that subsequently leads to a period of adjustment in order to adopt to the event (Davidson, 2009). The author points out that family members can end up with positive or negative coping mechanisms based on the events around the adjustment period. Coping strategies widely used by family caregivers through the duration their loved ones were admitted in ICU included problem-focused and emotional-focused strategies (Wartella, 2009).

More than half of family members who experience a loved ones critical illness have symptoms of anxiety and depression (Hickman Jr, 2010). Significant levels of depression, anxiety and acute stress are present in relatives of patients with critical illness (Wartella, 2009). The author reports that these psychological stressors significantly affected relatives who dealt with the ICU admission using emotional-focused mechanisms, especially the use of denial as a way to cope. Depression and anxiety have been shown to have different frequencies in different communities, this observation could be due to genetic, cultural or environmental factors (Köse, 2016).

2.2 Depression and Anxiety

The ICU is among the areas in a hospital setup where family members experience a lot of psychological suffering; furthermore, a lot is expected from relatives of ICU patients than anywhere else in the hospital (Pochard, 2005). With the admission of a patient to ICU, comes immense burden on the relatives (Beusekom, 2016). The author also noted that psychological turmoil was at its peak during admission to ICU and shortly after.

When a loved one is admitted to ICU family roles get altered significantly, financial demands, decision making on patient's behalf, the constant fear and uncertainty about the patient's prognosis are some factors that bring emotional and family crisis (Jamerson, 1996). The author also reports that most studies done have established the needs of the relatives but solutions to meet the identified needs have not been addressed.

Patent's family members are expected to decide what is best for the patient and prepare for the possibility of the death of their beloved; the logical consequence of such a burden is psychological distress with the most common being traumatic stress, anxiety and depression (Dracup, 2012). These group of psychological symptoms have been named post-intensive care syndrome – family (Juneja, 2019). A prospective multicentre study done in Europe among relatives of ICU patients depicted that over two thirds had anxiety and depressive symptomatology early in admission, the patient's clinical outcome notwithstanding (Andresen, 2015).

In a prospective, cross-sectional study conducted in three ICUs at an academic medical centre in the West Coast U.S.A, 79.7% of participants had symptoms of anxiety while 70.3% had depressive symptoms (McAdam, 2010).

In a descriptive and prospective observational study conducted in Chile, 30.4% of relatives had anxiety symptoms while 17.4% had symptoms of depression at the time the patient was admitted to ICU (Andresen, 2015). The author noted that relatives who had extreme anxiety and depressive symptoms, stood a higher risk of developing traumatic stress.

A cross-sectional study conducted among relatives of patients admitted in ICU at a University hospital in Malaysia showed that 71% of the respondents had anxiety symptoms while 63% had some form of depression (Dharmalingam, 2016). The study observed that a loved ones' admission to ICU was a devastating event which could cause anxiety and depression among family members.

At a tertiary hospital that cares for cancer patients in Sao Paulo, Brazil, a prospective study was conducted among family members of critically ill cancer patients. The findings were consistent with similar studies carried out the world over as 71% and 53% of caregivers were found to have anxiety and depressive symptoms respectively (Fumis, 2009).

A study conducted at training and research hospital in Turkey depicted that symptoms of anxiety and depression were recorded at 35.9% and 71.8% respectively (Köse, 2016). The author also noted that anxiety was high among relatives of young patients while both anxiety and depression were more pronounced in spouses than other family members of critically ill patients.

While there is limited information about relatives of ICU patients in the African setup, there is substantial data about psychological stress among family caregivers. In a mixed study conducted in Botswana among family members of patients with traumatic brain injury, 38.9% of respondents had anxiety symptoms while 33.4% had depressive symptoms (Mbakile-Mahlanza, 2016).

In a descriptive cross-sectional study carried out in Uganda among relatives of adult cancer patients, 35.2% of family caregivers had symptoms of anxiety while 48.2% scored significantly for depressive symptoms (Muliira, 2019).

In a cross-sectional study done at Kenyatta National Hospital to assess depression among relatives of patients on palliative care, it was found that up to 62.7% of respondents suffered moderate to severe symptoms of depression (Adol, 2014). In another cross-sectional descriptive study conducted at Kenyatta National Hospital to assess the burden on family members as they took care of stroke patients, it was found that about 47% of the family members had symptoms of depression (Amayo, 2018). Another cross-sectional study conducted at the Lea Toto Clinic in Kibera, Nairobi among relatives of HIV-Positive children showed similar findings where 29.8% of family members had anxiety while 64.5% had depression (Wainaina, 2012).

2.3 Coping Mechanisms

"Coping is defined as a person's cognitive and behavioural efforts in response to stressors that determine how those stressors will affect physical and emotional well-being," (Rückholdt, 2019). The author goes ahead to point out that it is a change process which demands deliberate attempts at reducing the effects of stress. "Coping does not imply success, but efforts to resolve a stressful situation," (Mukwato, 2010).

While considerable data exists about the needs and satisfaction of relatives with patients in ICU, there is limited data available on their feelings (Pochard, 2005). There is also limited information about how family members cope with the reality of a loved one being in ICU and how they operate as a family for the duration their loved one is admitted in ICU (McAdam, 2010).

The news of a loved ones admission to the ICU is often received with shock, and the poor outcomes associated with critical illness cause a lot of despair among relatives (Johansson, 2002). Family members are suddenly confronted with multiple stressors such as disruption of daily routine, financial constraints, changes in roles and the

constant fear of the possibility of losing a loved one (Johansson, 2002). The author also noted that complexity of this situation often cause a lot of uncertainty among family members as on how best to cope.

Coping is in essence a link between the stressful situation and an individual's wellness (Johansson, 2012). While it has been recognized over the years that stress is unavoidable in daily life, coping is what makes the biggest difference as regards to the eventual outcome of the individual (Lazarus, 1984).

The two major coping strategies employed by family caregivers with patients in ICU are emotion-focused and problem-focused forms of coping (Lazarus, 1984). Emotion-focused coping entails attempts at handling emotions felt during a stressful situation; it is often used when an individual has decided that the stressor cannot be modified (Mukwato, 2010) . Problem-focused coping entails attempts at finding solutions to the stressor (Mukwato, 2010).

Among the two coping mechanisms none is essentially good or bad, hence people may use them interchangeably while dealing with stress (Mukwato, 2010). The author also points out that successful coping is achieved by employing coping flexibility which entails the ability to alter and adjust coping strategies at different times and during various stressful situations.

Under this two broad categories, studies have identified relatives who dealt with their feelings in four ways. Family caregivers either alleviated, recycled, mastered or excluded their feelings (Johansson, 2002). In a study conducted in Zambia, the four coping strategies used by family members were: "seeking social support; reliance on God; positive attitude or re-affirmation; acquisition of information and education (Mukwato, 2010)".

The coping strategy used by a relative was highly dependent on the relative's own inner ability (Johansson, 2002). Regardless of the coping strategy used by the family members, the main objective was to attempt to make the whole ordeal bearable (Johansson, 2002).Unfortunately, people who employed the emotion-focused coping mechanism were more likely to suffer adverse emotional distress (Nyamathi, 1992).

2.4 Socio-Demographic Predictors of Anxiety, Depression and Coping Mechanisms

Relatives of ICU patients are predisposed to anxiety, depression and posttraumatic stress (Matt, 2017). This negative psychological outcomes are known as "post-intensive-care-syndrome family (PICS-F)" (Matt, 2017). The author also reports that as per studies in the U.S.A and Europe, up to 87% of relatives experience traumatic stress during the time their loved ones are admitted in ICU. It is worth noting that a third to half of family members suffer from anxiety and posttraumatic stress months after the ICU experience (Matt, 2017). It is reported that people who have close relations with the patient tend to have more anxiety and depression compared to distant relations; spouses and adult children suffer more emotional trauma compared to distant relatives because they often cope ineffectively (Rückholdt, 2019).

Relatives' limited understanding with regards to the illness, management options and unpredictability on prognosis led to high stress levels (Chui, 2007). It has also been documented that family members who were not satisfied with information from healthcare providers had significant levels of anxiety and depression (Fumis, 2015). A study in the U.S.A showed that up to 48% of relatives who felt they had been given inadequate information had symptoms of anxiety (Obringer, 2012).

When family members have to assume new roles and take up more responsibilities, it puts more burden on them and increases their stress (Johnson, 1995). Relatives who take up the role of making decisions on management plans on behalf of their incapacitated loved ones have reported significant emotional distress because of the pressure to understand complex medical terms and make choices that reflect the patients' wishes (Rückholdt, 2019).

When a loved one is separated from family members because of illness and the limited visiting hours in many ICU setups, it plays a role in increased levels of anxiety and depression (Chui, 2007).

Patients who were severely ill at the point of admission and those who were young in age were linked with significant levels of anxiety and depression among their relatives (Fumis, 2015). The author also noted that patients who required mechanical ventilation caused significant anxiety and depression among family members.

Older relatives and those of male gender reported less stress (Chui, 2007). A study conducted in Brazil had similar findings where female relatives were shown to have anxiety and depression to a greater extent (Fumis, 2015).

Family members experienced a lot of stress at the time of admission and their stress levels escalated as the duration of admission increased (Chui, 2007). However, relatives who had previous ICU experience took better control of the situation as they understood the need to take care of themselves in order to handle the current situation better (Rückholdt, 2019).

Older relatives used more coping methods and evidently coped better than young ones (Chui, 2007). The author pointed out that older family members had the tendency to accept reality. It has also been reported that less educated family members used emotion-focused coping mechanisms and they were more predisposed to depression (Chui, 2007). In Brazil, strong religious belief was reported as an effective coping mechanism and a source of hope (Fumis, 2015).

2.5 Conceptual Framework

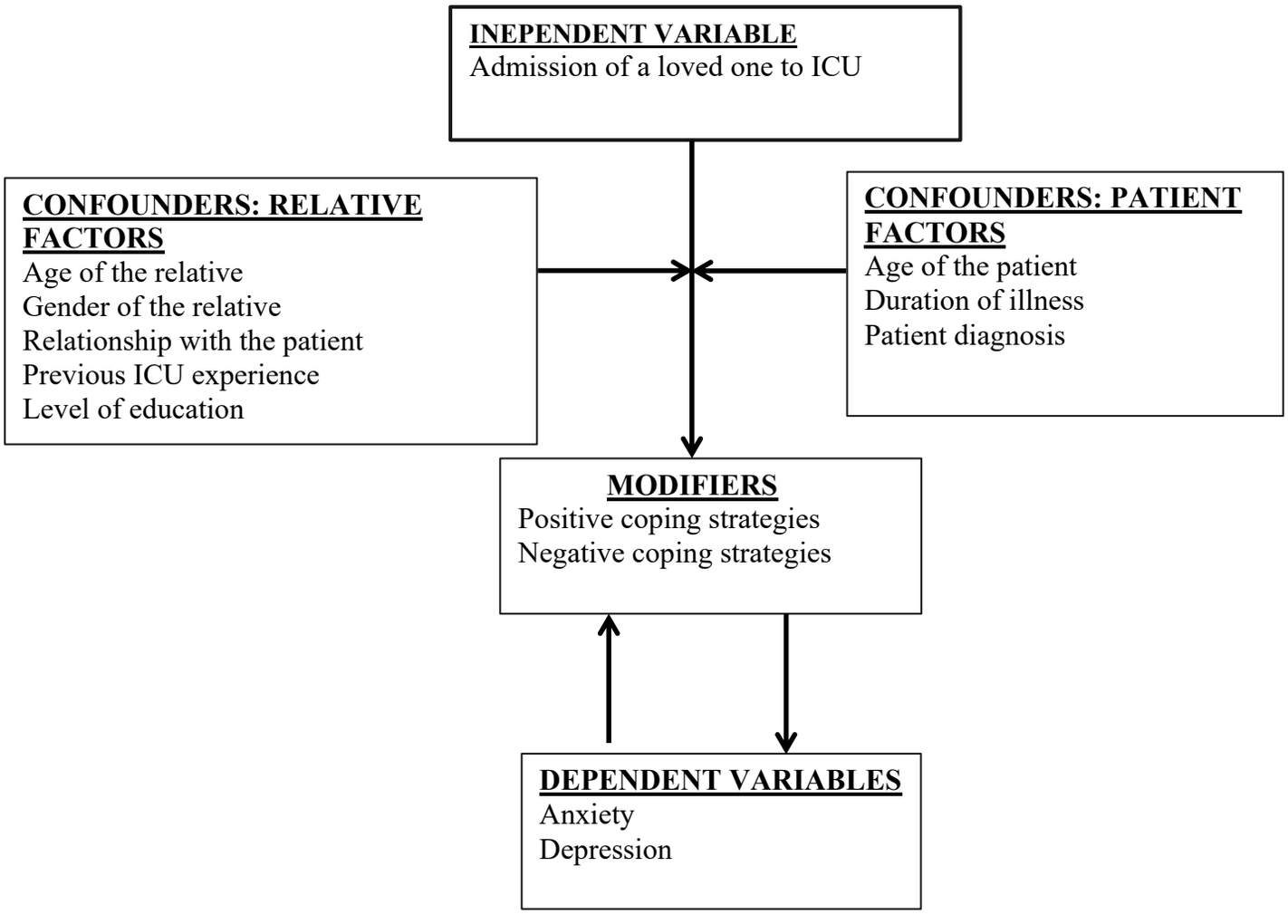

Figure 2.1: Conceptual Framework

When a patient is admitted to ICU (Independent variable), it can potentially lead to anxiety and depression (Dependent variables) on the part of his/her close relatives. The levels of anxiety and depression will vary depending on several factors. Some of these factors are patient related while others are family member related (Confounders). Younger patients, for example, tend to cause greater emotional distress compared to elderly patients. A patient who has fallen ill abruptly will cause more anxiety to his relatives than one who has been sick for a long time. On the other hand, older relatives tend to cope better with experience of having a loved one in ICU than younger ones. Male family members have also been reported to have less emotional distress compared to females. Relatives with higher levels of education also cope better than those with a low education or no education at all. In addition, relatives who have had a loved one admitted to ICU before used the past experience to help them cope better in a subsequent experience. Ultimately this confounding factors interact and play a huge role in determining whether a family member will predominantly use positive or negative coping strategies (Modifiers). For example, a relative who is young and with a low education is likely to use negative coping methods compared to one who is older and more educated. A family whose loved one has fallen ill abruptly is more likely to cope negatively than one whose loved one has been ailing for a long duration**.**

2.6 Problem Statement

Health problems affect the patient and cause concern to the entire family as well. Patients undergoing treatment in ICU are usually very sick. The unpredictable nature of the patients' outcome, fear of the death of a loved one, disruption to the family's routine and usual roles are some of the factors that cause substantial anxiety or depression on the part of the relatives to ICU patients. As it often occurs without

warning, family members are devastated by the situation and need to find alternative ways of coping to deal with the situation. Family members' needs, experiences and coping strategies have been reasonably studied especially in the developed world. There is need to comprehend these issues in different cultural setups so as to provide care that is relevant to the existing cultural practices. There is paucity of information in our set up as regards this topic and this research endeavoured to bridge that gap.

2.7 Research Question

1. Is there a relationship between ICU experience, anxiety and depression among relatives who had patients admitted to the ICU at Kenyatta National Hospital?
2. Is there an association between patient condition and the coping mechanisms employed by relatives?
3. What are the stress and coping approaches used by family members who had patients undergoing treatment in the ICU at Kenyatta National Hospital?

2.8 Objective

To assess anxiety, depression and the coping mechanisms among close relatives who had patients undergoing treatment in the ICU at Kenyatta National Hospital.

2.9 Specific Objectives

1. To ascertain the prevalence of anxiety and depression among relatives who had patients admitted to the ICU at Kenyatta National Hospital.
2. To scrutinize the coping strategies used by family members who had a relative admitted to the ICU at Kenyatta National Hospital.
3. To establish the association between patient condition and the coping strategies used by family members.

2.10 Hypothesis

2.10.1 Null Hypothesis

There is no statistically significant difference between the prevalence of anxiety and depression among relatives who had patients admitted in ICU at KNH and that of the general population (3.6% and 4.4% respectively).

2.10.2 Alternative Hypothesis

There is a statistically significant difference between the prevalence of anxiety and depression among relatives who had patients admitted in ICU at KNH and that of the general population (3.6% and 4.4% respectively).

2.11 Justification

While there is enough evidence from the developed world on the existence of anxiety and depression amidst family members who had patients in ICU, not much is known about the frequency of the same in developing countries. Furthermore, there is paucity of information on how relatives are getting along with their ICU experience.

Data from this study will help influence policy on this growing population who may be developing mental illnesses but don't get help. For instance, the hospital can assign psychologists to offer counseling services to relatives and support the family during the period their loved one is in ICU. The data will also bring to light which medical conditions are linked to substantial levels of anxiety and depression on the part of the family members.

Healthcare workers can also be proactive by giving family members detailed explanations on the patient condition, prognosis and educate relatives on good coping strategies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Study Design

This study used a cross sectional descriptive design, where levels of anxiety and depression among relatives who had patients admitted to the ICU and their coping mechanisms were analyzed.

Independent variables: Having a loved one admitted to ICU

Dependent variables: Anxiety and depression symptoms

Confounders: Patient factors: - Age, Diagnosis, Duration of illness

Relative factors: - Age, Gender, Relationship with patient, Level of education, Previous ICU experience.

Modifiers: Coping strategies

3.2 Study Setting

The study was carried out at Kenyatta National Hospital (KNH) in Nairobi County. KNH is the oldest and largest hospital in Kenya. Its ranked as a tertiary referral hospital for the Ministry of Health. It doubles up as the teaching hospital for the University of Nairobi, College of Health Sciences. The hospital is located in Upper Hill area of Nairobi which is the capital city of Kenya. KNH is approximately 3.5 kilometers west of the city's central business district and its complex measures roughly 45.7 acres. The hospital was founded in 1901 as the Native Civil hospital with a bed space of 40. It currently has a bed space of 1,800. However, due to overcrowding, the patient numbers can rise to 3,000. The hospital has 50 in-patient wards, 22 out-patient clinics, 4 intensive care units, 24 operating theaters and an Accident and Emergency Department.

Of the 4 ICUs, one is located on 1st floor with a bed space of 21 patients, one is located on 2nd floor with a bed space of 5 patients while two are located on 7th and 8th floor respectively each with a bed space of 5 patients. This puts the total ICU bed capacity of the hospital at 36. The ICU on 1st floor primarily admits critically ill patients with surgical conditions, the ICU on 2nd floor is dedicated to pediatric patients while the ICUs on 7th and 8th floor primarily admit critically ill adult patients with medical conditions. Patients are admitted to ICU from the Accident and Emergency wing, general wards, clinics or theaters. Occasionally patients are admitted as direct referrals from another hospital's ICU to the appropriate ICU in KNH.

3.3 Study Population

Close relatives included family members who had patients admitted to ICU at Kenyatta National Hospital. Relatives for the purpose of the study were limited to: parents; spouses; children above 18 years and siblings above 18 years. Family members who took part in this study did so voluntarily and were above eighteen years of age.

3.4 Sampling Method

The researcher used a census sampling technique which is a quantitative research method. A census study was chosen because the whole population was relatively small and it was recommended to include the whole population. Upon admission of a patient to ICU, data was collected from all family members who were eligible for the study as defined by this study.

3.5 Sample Determination

The researcher conducted the study for a period of two months, all relatives who were present and eligible for the study during this period were included in the study. Since the sampling method was a census, the sample size could not be determined using a formula. However, a sample size was estimated as follows:

The Main ICU with a bed capacity of 21 has an average of 54 patients per month, assuming each patient has at least two close relatives, this brings the number of relatives per month at 108. In two months (duration of the study) the number of relatives is 216.

The Medical ICU with a bed capacity of 10 has an average of 16 patients per month. With the same assumption of 2 relatives per patient, total relatives per month is 32. In two months (duration of the study) the number of relatives is 64.

Total study population was therefore estimated at **280**. This was, however, not achieved due to the COVID – 19 pandemic since the number of relatives allowed to visit was significantly limited to adhere to WHO recommendations of physical distancing. At the end of the two months, **239** participants had been interviewed. Of the 239 participants, 59 had loved ones admitted to the Medical ICU while 180 participants had loved ones admitted to the Main ICU.

3.6 Data Collection Tools

3.6.1 Social Demographic Questionnaire

A researcher designed questionnaire was used to obtain information on the socio-demographic aspects of the relatives.

3.6.2 Hospital Anxiety and Depression Scale (HADS)

HADS questionnaire was fashioned by Zigmond and Snaith in 1983. It is often used by healthcare workers to screen for levels of anxiety and depression that an individual may be experiencing. The HADS is a scale with fourteen items, seven of these items screen for anxiety and seven screen for depression. Each item on the questionnaire is scored from 0-3, therefore a participant can score between 0 and 21 for either anxiety or depression. Data returned from the HADS is ordinal as it makes use of a scale. Over the years, researchers have studied the HADS data to find out the cut-off points for caseness of anxiety or depression.

A review of literature has identified a cut-off point of 8/21 for anxiety or depression. For both scales, scores below 7 indicate non-cases; 8-10 mild; 11-14 moderate and 15-21 severe levels of anxiety or depression. For anxiety (HADS-A) this gave a specificity of 0.78 and a sensitivity of 0.9. For depression (HADS-D) this gave a specificity of 0.79 and a sensitivity of 0.83. HADS questionnaire has undergone validation in multiple languages, countries and settings. It is helpful for first time diagnosis and to monitor progression/resolution of emotional symptoms. The National Institute for Health and Care Excellence (NICE) advocates it as one of the tools for diagnosing depression and anxiety.

3.6.3 Family Crisis Oriented Personal Scale (F-COPES)

F-COPES questionnaire was fashioned by McCubbin HI, Olson DH and Larsen AS in 1987 and later revised in 1991. It is a self-administered questionnaire that aims to identify problem solving and behavioral techniques used by families when encountered with challenges. It is a 30 item scale which describes various coping mannerisms that individuals employ in times of challenges. The respondent scores the

item on a scale of 1-5 with 1 “strongly disagree”, and 5, “strongly agree”. Respondents rate to what extent they agree or disagree with each of the 30 coping traits. It takes about 10-15 minutes to complete the questionnaire. The 5-point scale measures 5 aspects which include: sharing our problems with relatives; seeking motivation and morale from friends and knowing we have the strength to resolve major problems. Scores are put together for a grand score in each of the following factor-areas:

1. Getting social support
2. Relabeling of the situation
3. Finding religious support
4. Actively going out to find and accept assistance
5. Passive appraisal

Overall reliability of the F-COPES has been established as ranging from 0.77-0.86 while test-retest reliability is 0.81.

3.7 Pre-test of Data Collection Tools

A pre-test was carried out at the Pediatric Intensive Care Unit (PICU) to assess the validity and feasibility of the research tools. The aim was to check for any errors that could have been present in the questionnaires and approximate the time required to complete filling the questionnaire. A sample size of 10 caregivers was used.

3.8 Data Collection Procedure

Institutional approval from the University of Nairobi, Department of Psychiatry and Kenyatta National Hospital Ethics and research committee was pursued. The clearance was then presented to Kenyatta National Hospital administration, Heads of

Departments in charge of Internal Medicine and Anesthesia, and the consultants in charge of each ICU.

On data collection day, the relatives of patients admitted to ICU in KNH were approached, the researcher introduced himself and explained the details of the study to be conducted. The researcher addressed any questions the relatives had and assured them of confidentiality. Written consent was sought from relatives who were also assured that declining to participate would not prejudice medical care for their loved ones and that participation was voluntary. Consent was sort by the researcher prior to data collection.

Family members were approached during visiting hours at 1:30 pm and 5:00 pm and requested to go to the Doctors Room where the questionnaire was given to the participants for completion as it was a self-administered questionnaire. Serialized system was used to facilitate confidentiality. Contacts of the researcher were shared with the participants to help communicate any concerns after the interview. Participants were allowed to take a break from the interview anytime they wished. Those seen to exhibit clinically significant anxiety and depressive symptoms were referred through the patient support system and liaison psychiatry for appropriate care.

Once a participant had completed the questionnaire and it had been checked for completeness and accuracy, the researcher kept it in an envelope and sealed the envelope for safe transportation to a secured cabinet. The researcher then thanked the participants for their time and for agreeing to be part of the study.

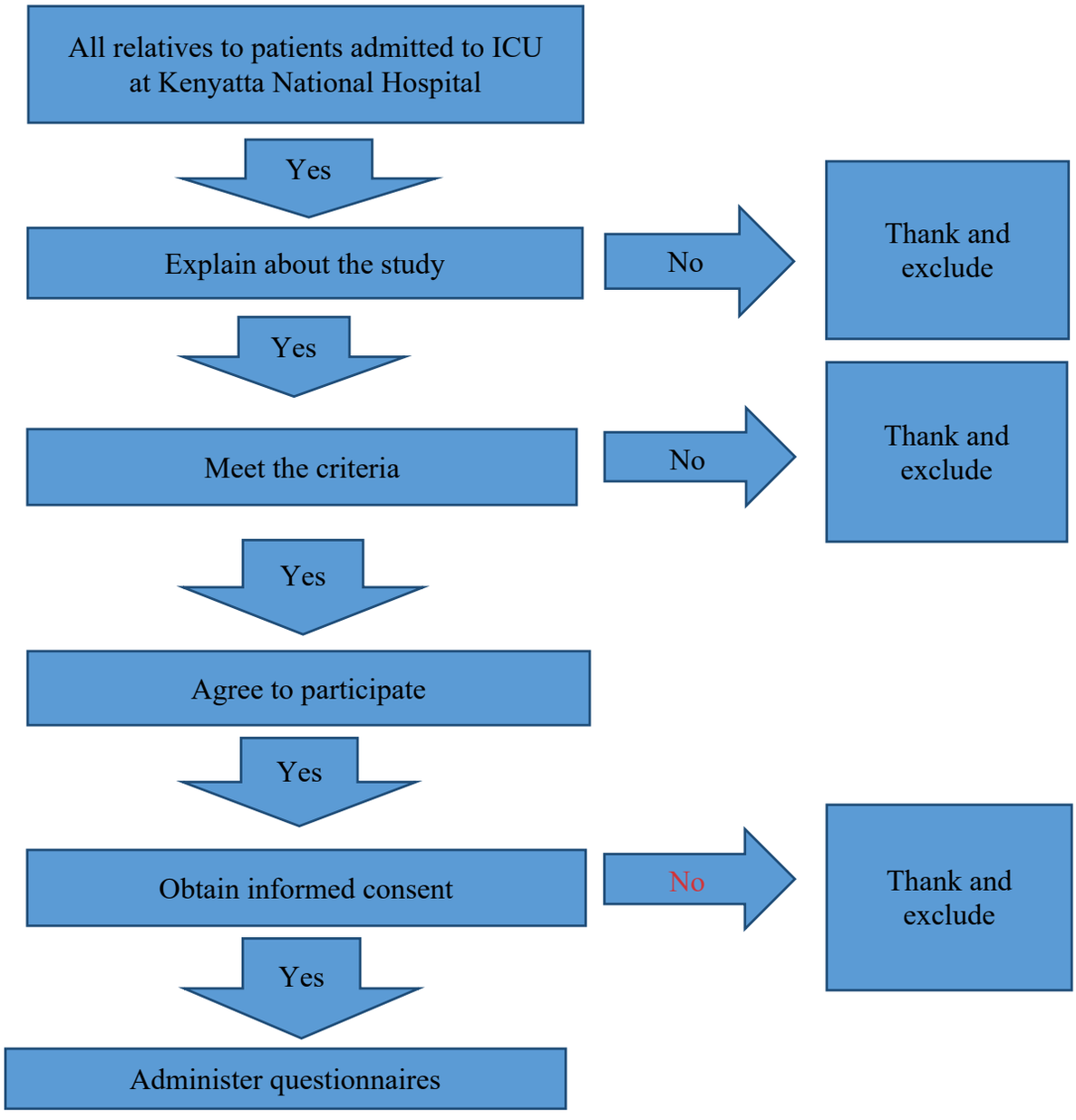

Figure 3.1: Data Collection Procedure Flow Chart

3.9 Quality Assurance Procedure

1. The research proposal was reviewed by the University of Nairobi, Department of Psychiatry and Kenyatta National Hospital Ethics and research committee which ensured that the proposal passed the quality threshold.
2. The researcher has received training on research methods and administration of the study questionnaire at the University of Nairobi and worked under supervisors from the University of Nairobi, Department of Psychiatry.
3. Emphasis was put on explaining the consent form to ensure that the study participants fully understood the questions that were asked and what the study entailed.
4. Study results were presented formally to the University of Nairobi, Department of Psychiatry and Kenyatta National Hospital – University of Nairobi Ethics and Research committee for peer review, further ensuring quality research.

3.10 Data Management

Once the data was enumerated, the researcher went through the questionnaires to ensure they had been correctly filled. In those that had gaps, the respondent was reached to fill in the missing data. The questionnaires were then placed in a sealed envelope and taken to the data entry site. At the data entry site coding was done by assigning serial numbers.

Data was then given to the clerk who entered it into the software. Double entry was done and discrepancies were cleaned out. The soft copy was protected by password while the hard copies were kept safely in a lockable cabinet that was only accessible to the researcher. All identifiers such as caregivers' name, file number of the patient were removed and data was sent for analysis.

3.11 Statistical Analysis Plan

The statistical package for social sciences (SPSS) version 23 was used to analyse the data using univariate, bivariate and multivariate statistical tests to determine the association between the variables of interest. The results were then presented in form of narratives, bar charts, tables and pie charts.

3.12 Ethical Consideration

1. Participants were made aware that participation in the study was purely voluntary and that those who declined to take part or withdrew at any stage would not be penalized or victimized in any way.
2. A detailed explanation of the study process and objectives, as well as, purpose of the study was given to all relatives eligible to participate in the study without coercion.
3. Confidentiality was observed.
4. Participants were made aware that there was no direct benefit to them as individuals but their participation would help inform interventions needed in the management of relatives of ICU patients. The data would also help influence policy formulation.
5. There was no interruption of services as participants were interviewed at the tail end of the visiting hours which allowed them ample time with their loved ones.
6. Psychological distress was anticipated on the part of the participants. Some of the adverse events anticipated included: Acute Anxiety; Panic attacks; Acute grief and excess worry. To minimize the risk of psychological distress, family members were allowed to skip questions they felt were too intrusive. It was also made clear to the participants that they were at liberty to withdraw from

the study at any point should they feel overwhelmed. Participants who exhibited mild to moderate emotional distress were given brief emergency psychotherapy by the researcher and allowed to withdraw from the study. They were also advised to seek professional help should the emotional distress persist while at home. Participants who exhibited significant distress were referred to KNH Mental Health department for specialised care.

7. Protection of participants' data was done by ensuring the raw data in soft copy was password protected while those in hard copy were kept under lock and key only accessible to the researcher. All identifiers were removed before the data was sent for analysis.

CHAPTER FOUR

DATA PRESENTATION AND FINDINGS

4.1 Introduction

This study's findings are presented in this chapter. The broad objective of the study was to assess levels of anxiety, depression and the coping strategies among close relatives of ICU patients at Kenyatta National Hospital. A total of 239 respondents who comprised of close relatives of the patients (Parents, Spouses, Siblings and Children) were interviewed between February 1st and March 28th 2021.

4.2 Socio-Demographic Information

The socio-demographic characteristics of the respondents are presented in table 4.1 below. There was an almost equal number of Male (50.2%) and Female (49.8%) participants. Those between the ages 30-39 were the majority at 34.7%. Majority of the participants were married (86.2%), had tertiary level of education (83.7%) and were employed (86.2%).

Majority of the respondents were spouses (29.3%). Of the 239 participants, 217(90.8%) had no prior ICU experience and an equal number were listed as the next of kin to the patient. Participants whose loved ones had been ill for over 2 weeks before ICU admission were 146(61.1%) while those whose loved ones had fallen acutely ill were 93(38.9%). Majority of the participants 219(91.6%) reported to have been the primary caregivers to the patients prior to hospitalization. At the time of conducting the study, majority of the participants 201(84.1%) had their loved ones in ICU for less than 2 weeks, while those whose loved ones had been in ICU for longer were 38(15.9%). All participants had some knowledge as regards the diagnosis their

loved ones while 98.7% were satisfied with the information given to them by healthcare workers as regards patient condition and progress.

Table 4.1: Socio-Demographic Characteristics

	Frequency (n=239)	Percent (%)
Age of participants		
20-29	42	17.6
30-39	83	34.7
40-49	73	30.5
50-59	30	12.6
60+	11	4.6
Sex		
Male	120	50.2
Female	119	49.8
Marital status		
Single	28	11.7
Married	206	86.2
Divorced	3	1.3
Widowed	2	0.8
Education		
Primary	3	1.3
Secondary	36	15.1
Tertiary	200	83.7
Employment status		
Employed	206	86.2
Unemployed	33	13.8
Relationship with patient		
Parent	65	27.2
Spouse	70	29.3
Sibling	65	27.2
Child	39	16.3

Prior ICU experience		
Yes	22	9.2
No	217	90.8
Listed as next of kin		
Yes	217	90.8
No	22	9.2
Duration of illness before ICU admission		
Acute (<14 days)	93	38.9
Chronic (>14 days)	146	61.1
Primary caregiver before hospitalization		
Yes	219	91.6
No	20	8.4
Duration loved one has been in ICU		
Acute (<14 days)	201	84.1
Chronic (>14 days)	38	15.9
Satisfied with information given		
Yes	236	98.7
No	3	1.3
Diagnosis awareness		
Yes	239	100.0

4.3 Prevalence of Anxiety

Levels of anxiety were measured using the HADS-A questionnaire. Majority of the participants 217(90.8%) had some form of anxiety while 22(9.2%) were non-cases. Participants with mild anxiety were 30(12.6%), those with moderate anxiety were 70(29.3%) while those with severe anxiety were 117(49.0%).

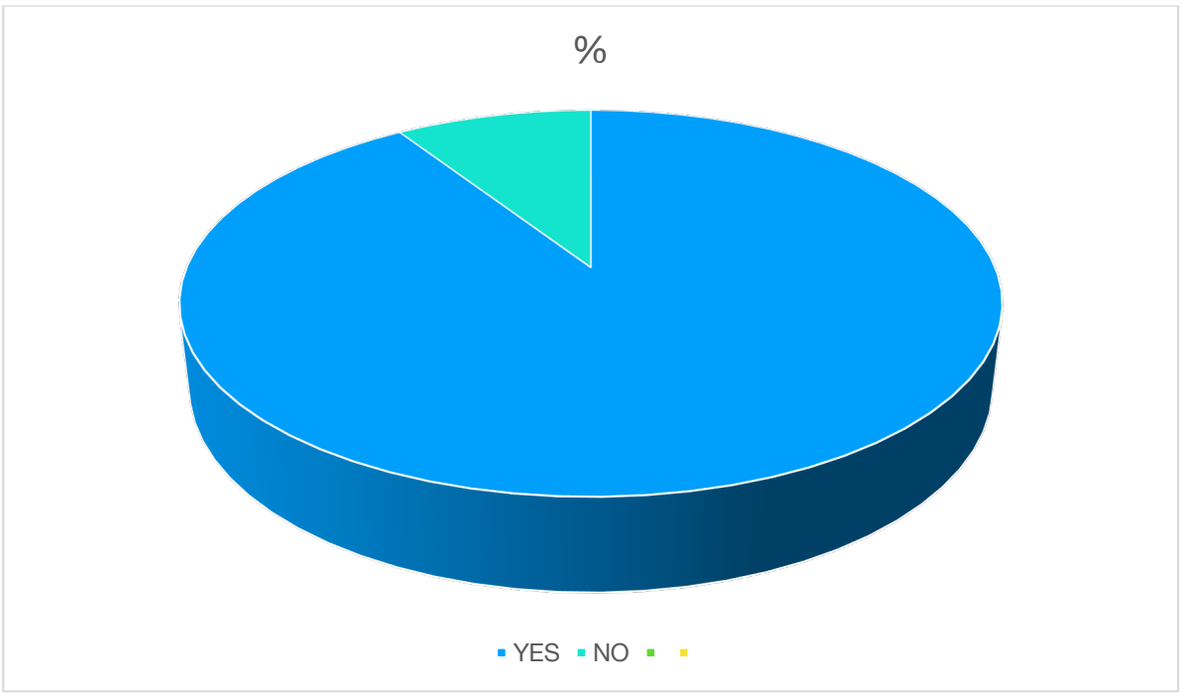

Figure 4.1: Prevalence of Anxiety

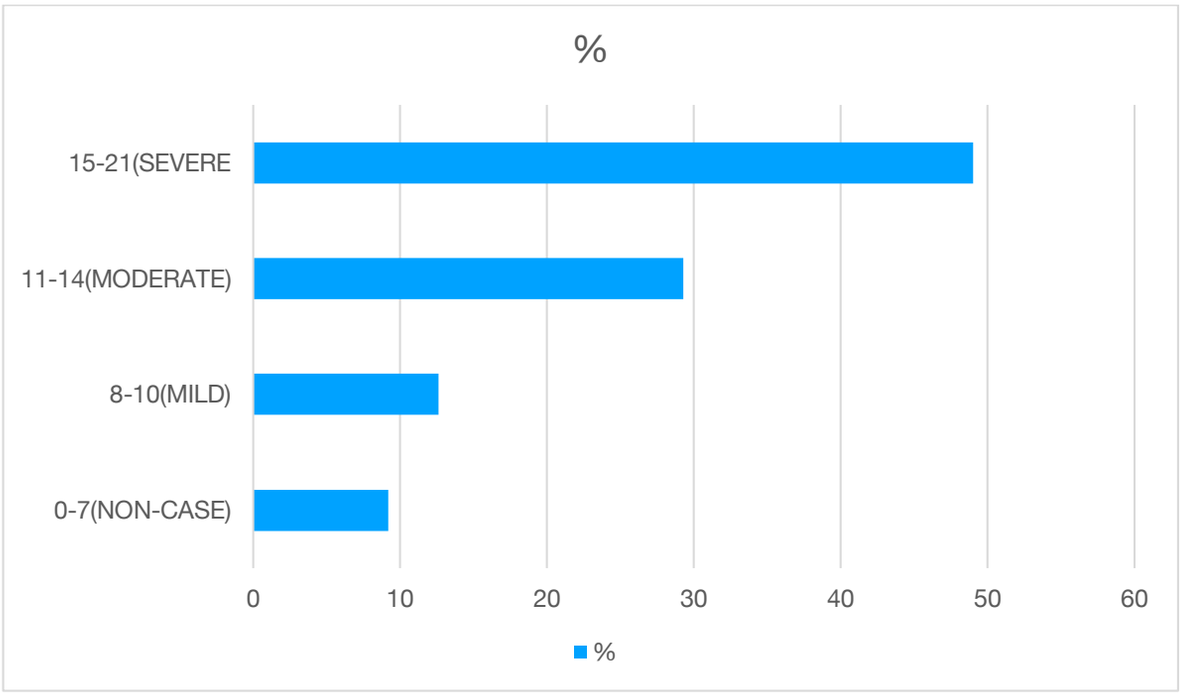

Figure 4.2: Levels of Anxiety according to HADS-A

4.3.1 Anxiety in Relation to Socio-demographic Characteristics

More females 111(51.2%) suffered anxiety compared to males 106(48.8%). There were more participants 73(33.6%) between the ages 30-39years who suffered anxiety compared to other age groups. Those between 50-59years were 5 times more likely to suffer anxiety compared to the 20-29years age group. Spouses and parents suffered more anxiety at 66(30.4%) and 62(28.6%) respectively. Parents were twice as likely to suffer anxiety compared to children. Relatives whose patients had been ill for over 2 weeks before ICU admission suffered more anxiety 135(62.2%) compared to those whole loved ones had been ill for less than 2 weeks 82(37.8%). On the other hand, relatives whose patients had been in ICU for less than 2 weeks suffered more anxiety 182(83.9%) than those whose loved ones had been in ICU for over 2 weeks 35(16.1%). Relatives who were the primary caregivers prior to hospitalization suffered significantly higher levels of anxiety 94.5% compared to those who were not primary caregivers 5.5%.

Table 4.2: Anxiety in Relation to Socio-Demographic Variables.

	n	Yes, *n (%)*	No, *n (%)*	OR (95% CI)*	p-value
Age of participants					
20-29	42	36 (16.6)	6 (27.3)	Reference	
30-39	83	73 (33.6)	10 (45.5)	1.2 (0.4 – 3.6)	0.724
40-49	73	69 (31.8)	4 (18.2)	2.9 (0.8 – 10.8)	0.119
50-59	30	29 (13.4)	1 (4.5)	4.8(0.6 – 42.4)	0.155
60+	11	10 (4.6)	1 (4.5)	1.7(0.2 – 15.5)	0.653
Relationship with patient					
Parent	65	62 (28.6)	3 (13.6)	1.7 (0.3 – 9.0)	0.519
Spouse	70	66 (30.4)	4 (18.2)	1.4 (0.3 – 6.5)	0.687
Sibling	65	53 (24.4)	12 (54.5)	0.4 (0.1 – 1.4)	0.142
Child	39	36 (16.6)	3 (13.6)	Reference	
Sex of participant					
Male	120	106 (48.8)	14 (63.6)	0.5 (0.2 – 1.4)	0.191
Female	119	111 (51.2)	8 (36.4)	Reference	
Duration of illness prior to ICU admission					
Acute (<14 days)	93	82 (37.8)	11 (50.0)	0.6 (0.3 – 1.5)	0.267
Chronic (>14 days)	146	135 (62.2)	11 (50.0)	Reference	
Duration of ICU admission					
Acute (<14 days)	201	182 (83.9)	19 (86.4)	0.8 (0.2 – 2.9)	0.761
Chronic (>14 days)	38	35 (16.1)	3 (13.6)	Reference	
Primary caregiver before hospitalization					
Yes	219	205 (94.5)	14 (63.6)	9.8 (3.4 – 27.8)	**<0.001**
No	20	12 (5.5)	8 (36.4)	Reference	

OR – Odds Ratio
CI – Confidence Interval

4.4 Prevalence of Depression

Levels of Depression was measured using the HADS-D questionnaire. Majority of the participants had some form of depression 131(54.8%) while 108(45.2%) had no depression. Participants with mild depression were 48(20.1%), those with moderate depression were 67(28.0%) while those with severe depression were 16(6.7%).

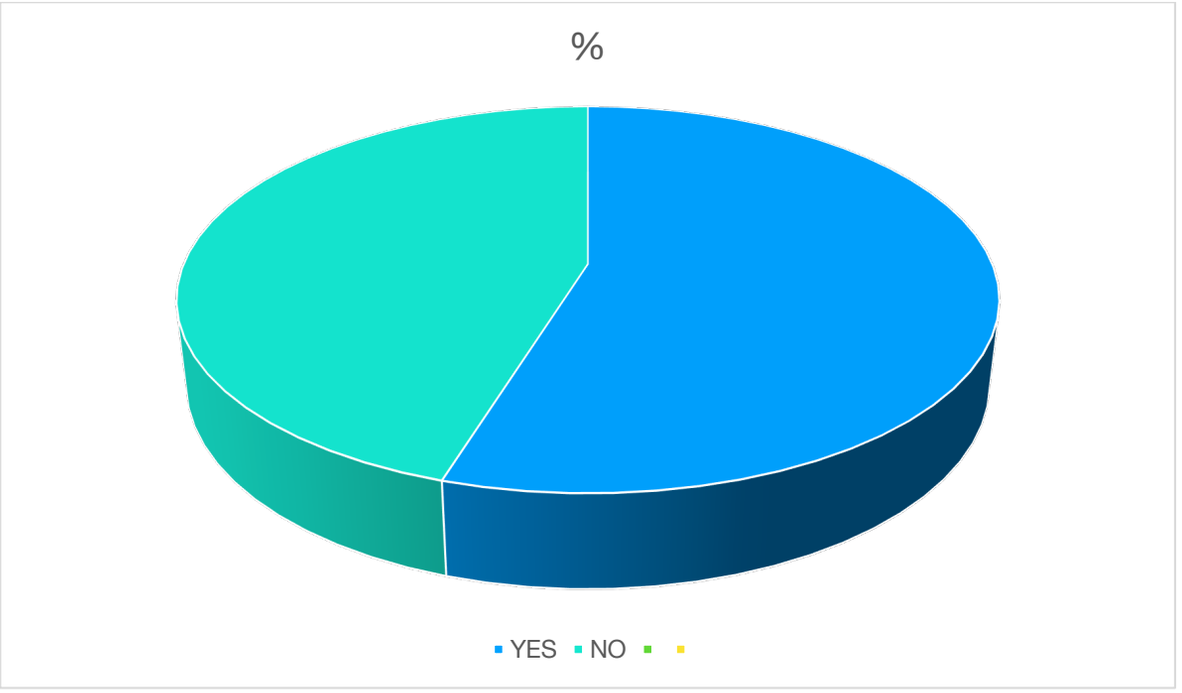

Figure 4.3: Prevalence of Depression

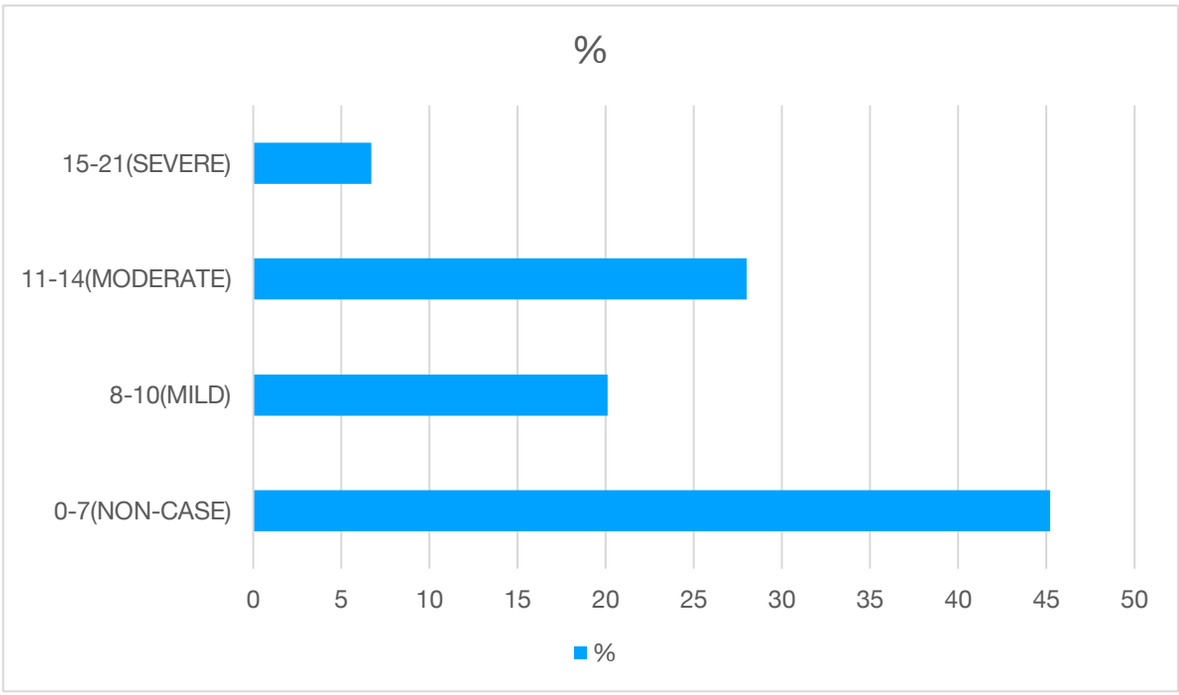

Figure 4.4: Levels of Depression according to HADS-D

4.4.1 Depression in Relation to Socio-Demographic Characteristics

As with anxiety, more females 95(72.5%) suffered depression compared to males 36(27.5%). Participants between the ages 40-49 suffered more depression 43(32.8%) than the other age groups. Participants between the ages 20-29 were more likely to suffer depression compared to all other age groups. Spouses suffered more depression 47(35.9%) than other relatives of patients admitted to ICU. They were also 1.6 times more likely to suffer depression compared to children. Participants whose loved ones had been ill for more than 2 weeks prior to ICU admission suffered more depression 87(66.4%) compared to those whose loved ones had been ill for less than 2 weeks 44(33.6%). On the other hand, relatives whose patients had been in ICU for less than 2 weeks suffered more depression 105(80.2%) compared to those whose patients had been in ICU for over 2 weeks 26(19.8%). Family members who were the primary caregivers prior to ICU admission suffered significantly higher levels of depression 123(93.9%) compared to those who were not primary caregivers 8(6.1%)

Table 4.3: Depression in relation to Socio-Demographic Variables

	N	Yes, *n (%)*	No, *n (%)*	or (95% CI)*	p-value
Age of participants					
20-29	42	26 (19.8)	16 (14.8)	Reference	
30-39	83	42 (32.1)	41 (38.0)	0.6 (0.3 – 1.3)	0.232
40-49	73	43 (32.8)	30 (27.8)	0.9 (0.4 – 1.9)	0.752
50-59	30	15 (11.5)	15 (13.9)	0.6 (0.2 – 1.6)	0.615
60+	11	5 (3.8)	6 (5.6)	0.5(0.1 – 2.0)	0.329
Relationship with patient					
Parent	65	37 (28.2)	28 (25.9)	1.0 (0.5 – 2.3)	0.959
Spouse	70	47 (35.9)	23 (21.3)	1.6 (0.7 – 3.5)	0.267
Sibling	65	25 (19.1)	40 (37.0)	0.5 (0.2 – 1.1)	0.077
Child	39	22 (16.8)	17 (15.7)	Reference	
Sex of participant					
Male	120	36 (27.5)	84 (77.8)	0.1 (0.1 – 0.2)	**<0.001**
Female	119	95 (72.5)	24 (22.2)	Reference	
Duration of illness prior to ICU admission					
Acute (<14 days)	93	44 (33.6)	49 (45.4)	0.6 (0.4 – 1.0)	0.064
Chronic (>14 days)	146	87 (66.4)	59 (54.6)	Reference	
Duration of ICU admission					
Acute (<14 days)	201	105 (80.2)	96 (88.9)	0.5 (0.2 – 1.1)	0.069
Chronic (>14 days)	38	26 (19.8)	12 (11.1)	Reference	
Primary caregiver before hospitalization					
Yes	219	123 (93.9)	96 (88.9)	1.9 (0.8 – 4.9)	0.170
No	20	8 (6.1)	12 (11.1)	Reference	

OR – Odds Ratio
CI – Confidence Interval

4.5 Coping Strategies used by Family Members of ICU Patients

Coping strategies were evaluated using the Family Crisis Oriented Personal Evaluation Scale(F-COPES). The 30 entries in the F-COPES are clustered into 5 broad categories which include: Acquiring social support; Reframing; Seeking spiritual support; Mobilizing family members to acquire and accept help and Passive appraisal. Overall, seeking spiritual support was used the most with a mean of 4.7. This was followed by mobilizing family members to acquire and accept help with a mean of 4.5 while passive appraisal was the least used coping strategy with a mean of 2.4

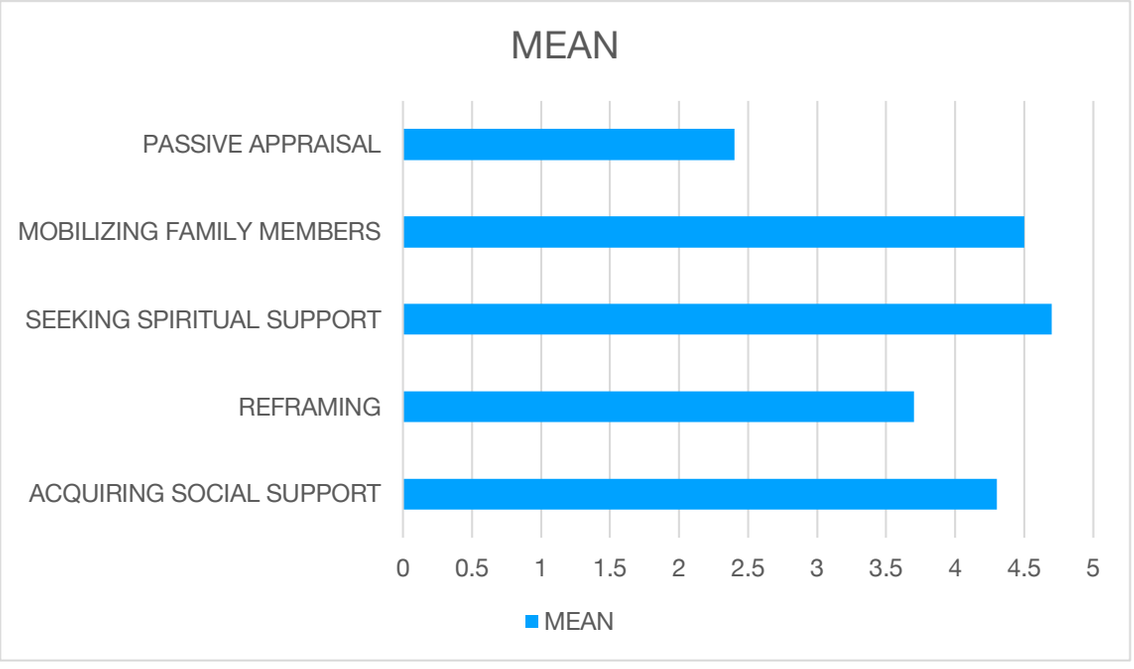

Figure 4.5: Coping Strategies used By Family Members

4.5.1 Coping strategies in relation to Age Groups

Acquiring social support was used the most by participants in the age group 40-49 with a mean of 4.6. Reframing was used most by family members above 60 years with a mean of 4.0. Seeking spiritual support was broadly used across all age groups with those in the age groups 30-59 using it the most. Participants in the age group 40-49 mobilized family members to acquire and accept help the most with a mean of 4.6.

Passive appraisal was mostly used by the young participants in age group 20-29 with a mean of 2.6.

Table 4.4: mean, SD Of The Five F-Copes Subscales With Age Of Participants

F-COPES subscale	20-29	30-39	40-49	50-59	60+	p-value
Acquiring social support	4.1 (0.8)	4.2 (0.9)	4.6 (0.5)	4.1 (0.8)	4.2 (0.6)	**0.006**
Reframing	3.6 (0.8)	3.8 (0.8)	3.7 (0.8)	3.8 (0.8)	4.0 (0.9)	0.499
Seeking spiritual support	4.5 (0.7)	4.7 (0.5)	4.7 (0.6)	4.7 (0.5)	4.6 (0.8)	0.417
Mobilizing family members to acquire and accept help	4.2 (0.9)	4.5 (0.7)	4.6 (0.7)	4.5 (0.6)	4.5 (0.8)	0.115
Passive appraisal	2.6 (1.2)	2.5 (1.2)	2.1 (1.1)	2.5 (1.3)	2.4 (0.7)	0.105

4.5.2 Coping strategies in relation to Gender

Females used acquiring social support (4.3) and seeking spiritual support(4.7) the most while males used reframing (4.0), mobilizing family members for help(4.6) and passive appraisal(2.7) the most. The difference in the use of reframing and passive appraisal was statistically significant with a P value p= <0.001.

Table 4.5: Mean, SD Of The Five F-Copes Subscales With Gender of Participants

F-COPES subscale	Male	Female	p-value
Acquiring social support	4.2 (0.7)	4.3 (0.8)	0.385
Reframing	4.0 (0.7)	3.4 (0.8)	**<0.001**
Seeking spiritual support	4.6 (0.7)	4.7 (0.5)	0.191
Mobilizing family members to acquire and accept help	4.6 (0.7)	4.4 (0.8)	**0.020**
Passive appraisal	2.7 (1.0)	2.0 (1.2)	**<0.001**

4.5.3 Coping strategies in relation to level of Education

Participants with primary level of education were very few (3) and were not included in the analysis. Acquiring social support was used more by participants with tertiary level of education (4.3). Reframing was used most by those with tertiary education(3.8). Seeking spiritual support was used equally between those with secondary and tertiary education with a mean of 4.7. Those with tertiary level of education mobilized family members for help the most(4.5) while passive appraisal was used most by those with secondary level of education(2.5).

Table 4.6: Mean, SD of the Five F-Copes Subscales With Level Of Education Of Participants

F-COPES subscale	Secondary	Tertiary	p-value
Acquiring social support	4.0 (0.7)	4.3 (0.8)	**0.016**
Reframing	3.5 (0.8)	3.8 (0.8)	0.070
Seeking spiritual support	4.7 (0.4)	4.7 (0.6)	0.698
Mobilizing family members to acquire and accept help	4.2 (0.9)	4.5 (0.7)	**0.006**
Passive appraisal	2.5 (1.0)	2.4 (1.2)	0.536

4.5.4 Coping strategies as used by different Relatives

Parents and spouses used acquiring social support the most (4.4) and also mobilized family members for help the most (4.6). Siblings used reframing the most (3.9). Majority of the relatives sort spiritual support with a mean of 4.7. Siblings on the other hand used passive appraisal the most(2.7).

Table 4.7: Mean, SD Of The Five F-Copes Subscales With Participants Relationship To The Patient

F-COPES subscale	Parent	Spouse	Sibling	Child	p-value
Acquiring social support	4.4 (0.8)	4.4 (0.6)	4.1 (0.9)	4.2 (0.8)	**0.022**
Reframing	3.8 (0.8)	3.5 (0.9)	3.9 (0.7)	3.7 (0.8)	0.052
Seeking spiritual support	4.7 (0.6)	4.7 (0.5)	4.5 (0.6)	4.7 (0.4)	0.092
Mobilizing family members to acquire and accept help	4.6 (0.7)	4.6 (0.7)	4.3 (0.8)	4.4 (0.8)	**0.037**
Passive appraisal	2.2 (1.2)	2.3 (1.1)	2.7 (1.1)	2.4 (1.2)	0.083

4.5.5 Coping strategies used in relation to length a loved one had been ill prior to ICU admission

Participants whose patients had been ill for more than 2 weeks prior to ICU admission used acquiring social support(4.5), seeking spiritual support(4.7) and mobilizing family members for help(4.6) the most. Participants whose patients had been ill for less than 2 weeks prior to ICU admission used reframing (3.9) and passive appraisal(2.7) the most.

Table 4.8: Mean, SD of The Five F-Copes Subscales With Duration Patients Had Been Ill Prior To ICU Admission

F-COPES subscale	Acute (<2WKS)	Chronic (>2WKS)	p-value
Acquiring social support	4.0 (0.9)	4.5 (0.6)	**<0.001**
Reframing	3.9 (0.7)	3.6 (0.9)	**0.023**
Seeking spiritual support	4.5 (0.7)	4.7 (0.5)	**0.018**
Mobilizing family members to acquire and accept help	4.2 (0.8)	4.6 (0.6)	**<0.001**
Passive appraisal	2.7 (1.1)	2.2 (1.1)	**0.002**

4.5.6 Coping strategies used in relation to the duration a loved one had been admitted to ICU

Participants whose relatives had been in ICU for less than 2 weeks used acquiring social support(4.3), reframing(3.8), seeking spiritual support(4.7) and mobilizing family members(4.5) the most. Relatives whose patients had been in ICU for more than 2 weeks used passive appraisal the most(2.9).

Table 4.9: Mean, SD Of The Five F-Copes Subscales With Duration Patients Had Been In ICU

F-COPES subscale	Acute (<2WKS)	Chronic (>2WKS)	p-value
Acquiring social support	4.3 (0.8)	4.2 (0.8)	0.308
Reframing	3.8 (0.8)	3.5 (0.8)	0.092
Seeking spiritual support	4.7 (0.6)	4.5 (0.6)	**0.048**
Mobilizing family members to acquire and accept help	4.5 (0.7)	4.4 (0.7)	0.238
Passive appraisal	2.3 (1.2)	2.9 (1.0)	**0.005**

4.5.7 Coping Strategies in Relation to Prior ICU Experience

Participants who had never had a relative admitted to ICU before used acquiring social support(4.3), seeking spiritual support(4.7) and mobilizing family members for help(4.5) the most. Participants with prior ICU experience used passive appraisal(2.9) the most. Reframing was used equally between those with and those without prior ICU experience (3.7).

Table 4.10: Mean, SD of The Five F-Copes Subscales In Relation To Prior ICU Experience

F-COPES subscale	Yes	No	p-value
Acquiring social support	3.9 (0.7)	4.3 (0.8)	**0.027**
Reframing	3.7 (0.8)	3.7 (0.8)	0.939
Seeking spiritual support	4.1 (0.8)	4.7 (0.5)	**0.001**
Mobilizing family members to acquire and accept help	4.2 (0.7)	4.5 (0.7)	0.068
Passive appraisal	2.9 (1.0)	2.3 (1.1)	**0.017**

CHAPTER FIVE

DISCUSSION, LIMITATIONS, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

This study adds to the evidence base on the existence of anxiety and depression among close relatives of patients admitted to ICU. It especially shades some light on the coping mechanisms used by family members during the period a loved one was admitted to ICU, a field with paucity of data in our local setup.

5.1.1 Socio-Demographic Characteristics

This study had an almost equal number of male(50.2%) and female(49.8%) participants. This finding differs from majority of the studies where females were the majority. A study conducted by (McAdam, 2010) in the USA had 58.1% of female participants. A study done in Malaysia by (T. Kumaravadivel Dharmalingam, 2016) had 55.0% of female participants. Locally, a study done by (WAINAINA, 2012) had 86.8% of female participants. This difference can be explained by the restrictions and policies that were put in place in order to curb the spread of the COVID-19 infection. Visitors were limited to two per ICU patient, and where it allowed, most families chose a male and a female family member as representatives.

5.1.2 Anxiety and Depression

Majority of the participants suffered some level of anxiety (91%) and depression (55%). The admission of loved one to ICU is shown to cause significant emotional stress on the part of the family members. This findings are in keeping with majority of studies conducted among relatives of ICU patients. (McAdam, 2010) in USA found a

high prevalence of anxiety(79.7%) and depression(70.3%). A study conducted in Brazil by (Fumis R. R., 2009) also found a high prevalence of anxiety(71%) and depression(53%). In Kenya, a study that only screened for depression by (Amayo L., 2018) found the prevalence of depression at 47%. In another study by (WAINAINA, 2012), the prevalence of anxiety was at 29.8% while depression was at 64.5%.

Family members who were the primary caregivers to the patients prior to ICU admission are seen to have significantly higher levels of anxiety (94.5%) and depression(93.9%) compared to the rest of the family members. This findings are in keeping with those found by (Rückholdt M. T., 2019) where he observed that caregivers who have close relations with the patient suffered more anxiety and depression. The reality of having a loved one admitted to ICU with the uncertainty of the outcome clearly takes a toll on the relatives.

5.1.3 Coping Strategies

For the majority of the participants, having a religious inclination and seeking spiritual support was the most used strategy. This observation is similar to that seen by (Fumis R. R., 2015) where having a strong religious belief was reported to be an effective coping mechanism.

Family members with tertiary education are seen to generally use better coping strategies compared to those with secondary level of education. Similar findings were reported by (Chui,2007), where it was observed relatives with lower levels of education did not cope as well as those with higher levels of education.

Family members with prior ICU experience did not use better coping mechanisms compared to those without prior ICU experience. This finding differs from that seen

by (Rückholdt, 2019) where caregivers with previous ICU experience had better control of the situation.

Female participants used better coping mechanisms compared to the males. This differs from a study by (Chui, 2007) where male family members were shown to cop better. Despite this difference in coping strategies, females in both studies suffered more anxiety and depression compared to the males. Despite the use of better coping strategies by the females in this study, that did not translate into protection from higher levels of anxiety and depression. This could be explained by the very nature of the diseases where females are generally more likely to suffer anxiety and depression.

5.2 Limitations

1. The total number of participants at the end of the study period was short of the initial anticipated figure. This was due to the slow process of collecting data as measures to curb the spread of COVID-19 had to be observed.
2. Due to the COVID-19 pandemic, the number of visitors per patient in ICU was limited to two. This regulation denied us the opportunity to interact with other members of the family who would otherwise have visited their loved ones. This findings may, therefore, not be generalised to the normal demographics of close relatives of patients in ICU.

5.3 Conclusion

1. Relatives with patients admitted to ICU suffer significant emotional distress.
2. The prevalence of anxiety(91%) and depression(55%) in relatives of ICU patients is much greater than that of the general population (3.6% and 4.4% respectively).
3. The difference in prevalence of anxiety between males and females was not statistically significant.
4. Females suffered significantly higher levels of depression.
5. Family members who were the primary caregivers to the patients prior to ICU admission suffered significantly higher levels of anxiety and depression.
6. Strong religious belief was a predominant coping strategy.

5.4 Recommendations

1. All relatives of patients admitted to ICU should be screened for Anxiety and Depression.
2. Psychological support should be offered periodically to all relatives of ICU patients regardless of how they score in the screening.
3. Healthcare providers should not only concentrate on the management of the critically ill patients but should address the concerns of their relatives as well.
4. Further studies could adopt a qualitative approach for a more detailed exploration of stress and coping.
5. A longitudinal study is recommended as family's stress and coping may change during the patient's course of illness.

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APPENDICES

APPENDIX A: Hospital Anxiety and Depression Scale-Anxiety (HADS-A)

Tick the box beside the reply that is closest to how you have been feeling in the past week.

Don't take too long over your replies, your immediate is best.

I feel tense or wound	
Most of the time	3
A lot of the time	2
From time to time, occasionally	1
Not at all	0
I get a sort of frightened feeling as if something awful is about to happen	
Very definitely and quite badly	3
Yes, but not too badly	2
A little, but it doesn't worry me	1
Not at all	0
Worrying thoughts go through my mind	
A great deal of the time	3
A lot of the time	2
From time to time, but not too often	1
Not at all	0
I can sit at ease and feel relaxed	
Definitely	0
Usually	1
Not often	2
Not at all	3
I get a sort of frightened feeling like butterflies in the stomach	
Not at all	0
Occasionally	1
Quite often	2
Very often	3
I feel restless as if I have to be on the move	
Very much indeed	3
Quite a lot	2
Not very much	1
Not at all	0
I get sudden feelings of panic	
Very often indeed	3
Quite often	2
Not very often	1
Not at all	0

APPENDIX B: Hospital Anxiety and Depression Scale-Depression (HADS-D)

Tick the box beside the reply that is closest to how you have been feeling in the past week.

Don't take too long over your replies, your immediate is best.

I still enjoy the things I used to enjoy	
Definitely as much	0
Not quite so much	1
Only a little	2
Hardly at all	3
I can laugh and see the funny side of things	
As much as I always could	0
Not quite so much now	1
Definitely not so much now	2
Not at all	3
I feel cheerful	
Not at all	3
Not often	2
Sometimes	1
Most of the time	0
I feel as if I am slowed down	
Nearly all the time	3
Very often	2
Sometime	1
Not at all	0
I have lost interest in my appearance	
Definitely	3
I don't take as much care as I should	2
I may not take quite as much care	1
I take just as much care as ever	0
I look forward with enjoyment to things	
As much as I ever did	0
Rather less than I used to	1
Definitely less than I used to	2
Hardly at all	3
I can enjoy a good book, radio or television program	
Often	0
Sometimes	1
Not often	2
Very seldom	3

APPENDIX C: Family Crisis Oriented Personal Evaluation Scale (F-COPES)

When we face problems or difficulties in our family we respond by:	**Strongly Disagree**	**Moderately Disagree**	**Neither Agree Nor Disagree**	**Moderately Agree**	**Strongly Agree**
1. Sharing our difficulties with relatives	1	2	3	4	5
2. Seeking encouragement and support from friends	1	2	3	4	5
3. Knowing we have the power to solve major problems	1	2	3	4	5
4. Seeking information and advice from person in other families who have faced the same or similar problems	1	2	3	4	5
5. Seeking advice from relatives (grandparents, etc.)	1	2	3	4	5
6. Seeking assistance from community agencies and programs designed to help families in our situation	1	2	3	4	5
7. Knowing that we have the strength with our own family to solve our problems	1	2	3	4	5
8. Receiving gifts and favors from neighbors (e.g., food, taking in mail, etc.)	1	2	3	4	5

9. Seeking information and advice from the family doctor	1	2	3	4	5
10. Asking neighbors for favors and assistance	1	2	3	4	5
11. Facing the problems “head-on” and trying to get solution right away	1	2	3	4	5
12. Watching television	1	2	3	4	5
13. Showing that we are strong	1	2	3	4	5
14. Attending church services	1	2	3	4	5
15. Accepting stressful events as a fact of life	1	2	3	4	5
16. Sharing concerns with close friends	1	2	3	4	5
17. Knowing luck plays a big part in how well we are able to solve family problems	1	2	3	4	5
18. Exercising with friends to stay fit and reduce tension	1	2	3	4	5
19. Accepting that difficulties occur unexpectedly	1	2	3	4	5
20. Doing things with relatives (get-together, dinners, etc.)	1	2	3	4	5

21. Seeking professional counseling and help for family difficulties	1	2	3	4	5
22. Believing we can handle our own problems	1	2	3	4	5
23. Participating in church activities	1	2	3	4	5
24. Defining the family problem in a more positive way so that we do not become too discouraged	1	2	3	4	5
25. Asking relatives how they feel about problems we face	1	2	3	4	5
26. Feeling that no matter what we do to prepare, we will have difficulty handling problems	1	2	3	4	5
27. Seeking advice from a minister	1	2	3	4	5
28. Believing if we wait long enough, the problem will go away	1	2	3	4	5
29. Sharing problems with neighbors	1	2	3	4	5
30. Having faith in God	1	2	3	4	5

Purpose

The Family Crisis Oriented Personal Evaluation Scales is designed to record problem-solving, attitudes and behaviors which families develop to respond to problems or difficulties.

Directions

First, read the list of “Response Choices" one at a time.

Second, decide how well each statement describes your attitudes and behavior in response to problems or difficulties. If the statement describes your response very well, then circle the number 5 indicating that you strongly agree; if the statement does not describe your response at all, then circle the number 1 indicating that you strongly disagree; if the statement describes your response to some degree, then select a number 2, 3, or 4 to indicate how much you agree or disagree with the statement about your response.

Please circle a number (1, 2, 3, 4, or 5) to match your response to each statement. Thank you.

APPENDIX D: Anxiety and Depression, and the Coping Strategies Among Close Relatives of Patients in Critical Care Units At Kenyatta National Hospital

Date: / / **Study ID**

Instructions

1. Do not write your name on the Questionnaires
2. Tick in the boxes provided where applicable
3. For open ended questions write the answers in the space provided
4. Answer all questions
5. All information obtained will remain confidential

Socio-Demographic Questionnaire

1. What is your age?
2. What is your gender? Male ☐ Female ☐
3. What is your marital status? Single ☐ Married ☐ Divorced ☐ Widowed ☐
4. What is your education level? None ☐ Primary ☐ Secondary ☐ Tertiary ☐
5. What is your employment status? Employed ☐ Unemployed ☐
6. What is the age of your patient?
7. Do you know the condition your patient is suffering from? Yes ☐ No ☐

7.8 If yes, what is the diagnosis?.....

8. What is your relationship with the patient?
    1. Parent
    2. Spouse
    3. Sibling
    4. Child

9. Have you ever had a loved one admitted to ICU before? Yes ☐ No ☐

9.8 If YES: a) when was it?

b) how many times have you had a loved one admitted to ICU?

c) what was the outcome? DISCHARGED ☐ DIED ☐

10. Are you listed as the next of kin/ decision maker on behalf of the patient? Yes ☐ No ☐
11. How long has the patient been sick before ICU admission? ACUTE(<14 days) ☐ CHRONIC(>14 days) ☐
12. Were you the primary caregiver to the patient before hospitalization? YES NO
13. For how long has your patient been admitted in the ICU?

Less than 14 days ☐

More than 14 days ☐

14. Are you satisfied with the information given to you by the Doctors/ Nurses about the progress of your patient? ☐ Yes ☐ No

APPENDIX E: Participant consent Form

Title of study: Anxiety and Depression, and the Coping Strategies among Close Relatives of Patients in Critical Care Units at Kenyatta National Hospital.

Principal Investigator: Rajab M. Saddam. Psychiatry student, University of Nairobi

Co-Investigators: Kang'ethe Racheal, Pius Kigamwa. Lecturer, Department of Psychiatry, University of Nairobi

Introduction

I am conducting a study to assess the levels of anxiety and depression among close relatives of patients admitted to the Intensive Care Units at Kenyatta National Hospital, and their coping methods during that period. The purpose of this form is to give you the information you will need to help you decide whether or not you will be a participant in this study. Feel free to ask any questions about the research or this form that may not be clear. If you feel I have addressed all of your concerns to your satisfaction, then you may decide to participate in the study or not. Once you understand and agree to be in the study I will request you to sign your name on this form indicating that your participation is voluntary, and you may withdraw from the study at any time, without necessarily giving a reason. There will be no repercussions if you choose not to participate or withdraw in the middle of the study and you will continue to enjoy the services being rendered in this facility.

Purpose of the Research

The researchers listed above are collecting data on individuals who are related to patients admitted in the Intensive Care Units at Kenyatta National Hospital. The purpose of the study is to assess if family members suffer symptoms of anxiety and depression caused by a loved one's admission to ICU and to find out what coping methods they use during this difficult time.

What will happen if you decide to be in this research study?

If you agree to participate in the study, the researcher will give you four questionnaires to fill; you will be in a room together with fellow study participants

Duration

The data collection will take a period of 45 minutes to 1 hour. During this time, you will only be expected to answer the questions as outlined.

Risks

There is no physical harm anticipated when taking part in this research, however psychological harm may be experienced as this is a highly emotional study. In the event that this happens and you need to take a break, the researcher will allow you to take all the time you need. If the distress is mild or moderate, the researcher will have a brief psychotherapy session with you and allow you home. You will also be advised to seek professional help should the emotional distress persist when you are at home. In case the emotional distress is severe you will be referred to the hospital psychologist for professional help. You are also allowed to withdraw from the study should you feel emotionally burdened by the exercise.

Confidentiality

The identity of those taking part in the research will not be disclosed or shared with anyone. To ensure confidentiality the data collection forms will not bear your name. You will be identified by the study code number. Only the researchers will recognize what your number is and the data collected will be kept under lock and key. All the data and the information obtained during the study will be used for the sole purpose of meeting the objective of the study.

Benefits

There are no direct benefits to you as an individual, however the information you provide will help the hospital in policy formulation, and it will also provide clinicians with a guideline on how to address family members' emotional needs.

Will your participation in this study cost you anything?

There is no financial implication if you choose to participate in the study.

There is also no monetary gain if you choose to participate in the study.

What if you have questions in the future?

If you have further questions or concerns about participating in this study, please call or send a text message to the study staff at the number provided at the bottom of this page.

For more information about your rights as a research participant you may contact the Secretary/Chairperson, Kenyatta National Hospital-University of Nairobi Ethics and Research Committee Telephone No. 2726300 Ext. 44102 email uonknh_erc@uonbi.ac.ke.

The study staff will pay you back for your charges to these numbers if the call is for study-related communication.

What are your other choices?

Your decision to participate in research is voluntary. You are free to decline participation in the study and you can withdraw from the study at any time without injustice or loss of any benefits.

APPENDIX F: Participant Consent Form (Statement of Consent)

Participant's Statement

I have read this consent form or had the information read to me. I have had the chance to discuss this research study with a study counsellor. I have had my questions answered in a language that I understand. The risks and benefits have been explained to me. I understand that my participation in this study is voluntary and that I may choose to withdraw at any time. I freely agree to participate in this research study.

I understand that all efforts will be made to keep information regarding my personal identity confidential. By signing this consent form, I have not given up any of the legal rights that I have as a participant in a research study.

I agree to participate in this research study: Yes No

Participant printed name: _____

Participant signature / Thumb stamp _____ Date _____

Researcher's Statement

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has willingly and freely given his/her consent.

Researcher's Name: _____ Date: _____

Signature _____

If you have more questions or concerns about participating in this study please contact the researcher on the number 0727-496-074 or her supervisor, Dr. Kang'ethe. You can also contact KNH/UON-ERC on 276300 Ext 44102 email uonknh-erc@uonbi.ac

APPENDIX G: Study Timelines

S/N	Activities	Oct 2020-Jan 2021	Feb -April 2021	May – Aug 2021	Aug 2021
1	proposal planning				
2	Preparing Chapter one and its submission				
3	Preparing Chapter two and submission				
4	Preparing Chapter three and its submission				
5	Proposal review by supervisor				
6	Questionnaire preparation				
7	Submission of Final copy of proposal				
	Ethics Review				
8	Collection of data & analysis				
9	Preparation of chapter four and five of research report				
10	Draft final report and its submission				
11	Presentation of final Research project				
12	Working on panel recommendations				
13	Submission of Final Research project				

APPENDIX H: Study Budget

	Project Report Budget	KSH
#	**Activity Description**	**Cost**
1	Stationary	2,000
2	KNHUON ERC fee	2,000
4	Data entry in SPSS, cleaning and analysis	30,000
5	Typing, Printing and binding final report	15,000
6	Transport to KNH for data collection.	10,000
7	Communication	2,000
8.	Miscellaneous (10% of total budget)	6,150
	Grand Budget	**67,150**

Idhini ya Mshiriki

Kichwa cha Utafiti: Wasiwasi na Huzuni, na Mikakati ya kujikinga kati ya Jamaa wa Wagonjwa katika Vituo vya Wagonjwa Hali Maututi katika Hospitali ya Kitaifa ya Kenyatta.

Mtafiti Mkuu: Rajab M. Saddam, mwanafunzi wa chuo kikuu cha Nairobi

Mkosoaji wa Utafiti: Kang'ethe Racheal, Pius Kigamwa. Wahadhiri chuo kikuu cha Nairobi.

Utangulizi

Ninafanya utafiti ili kutathmini viwango vya wasiwasi na huzuni kati ya jamaa wa wagonjwa waliolazwa kwenye Vituo Maalum vya Utunzaji katika Hospitali ya Kitaifa ya Kenyatta, na njia zao za kukabiliana wakati huo. Madhumuni ya fomu hii ni kukupa habari ambayo utahitaji kukusaidia kuamua ikiwa utakuwa mshiriki katika utafiti huu. Jisikie huru kuuliza maswali yoyote juu ya utafiti au fomu hii ambayo inaweza kuwa wazi. Ikiwa unahisi nimeshughulikia maswala yako yote kwa kuridhika kwako, basi unaweza kuamua kushiriki katika masomo au la. Mara tu utakapoelewa na kukubali kuwa katika utafiti nitakuomba utie saini jina lako kwenye fomu hii ilionyesha kuwa ushiriki wako ni wa hiari, na unaweza kujiondoa kutoka kwa masomo wakati wowote, bila lazima kutoa sababu. Hakutakuwa na athari tena ikiwa utachagua kutoshiriki au kujiondoa katikati ya utafiti na utaendelea kufurahia huduma zinazotolewa katika kituo hiki.

Kusudi la Utafiti

Watafiti waliotajwa hapo juu wanahoji watu ambao wanahusiana na wagonjwa waliolazwa katika Vituo Maalum vya Utunzaji katika Hospitali ya Kitaifa ya Kenyatta. Madhumuni ya mahojiano ni kutathmini ikiwa wanafamilia wanakabiliwa na dalili za wasiwasi na unyogovu unaosababishwa na kulazwa kwa mpendwa kwa ICU na kujua ni njia gani za kukabiliana na hali hii wanazotumia wakati huu mgumu.

Nini kitatokea ikiwa utaamua kuwa katika utafiti huu?

Ikiwa unakubali kushiriki katika utafiti, mtafiti atakupa dodoso nne za kujaza; utakuwa kwenye chumba pamoja na washiriki wenzako wa masomo.

Muda

Itachukua muda wa dakika 45 hadi saa 1 kukusanya takwimu. Wakati huu, utatarajiwa kujibu maswali kama ilivyoainishwa.

Hatari

Hakuna jeraha la mwili linalotarajiwa wakati unashiriki katika utafiti huu, hata hivyo kuumia kisaikolojia kunaweza kupatikana kwani huu ni uchunguzi wa kihemko. Katika tukio ambalo hii itatokea na unahitaji kuchukua mapumziko, mtafiti atakuruhusu kuchukua wakati wote unahitaji, ikiwa utahisi kuwa unahitaji msaada wa kitaalam utapelekwa kwa mwanasaikolojia wa hospitali kwa usaidizi zaidi. Isitoshe, unao uhuru wa kujiondoa katika utafiti huu wakati wowote ikiwa utahisi inaathiri hisia zako.

Siri
Utambulisho wa wale wanaoshiriki katika utafiti hautafunuliwa au kushirikiwa na mtu yeyote. Ili kuhakikisha usiri, fomu za ukusanyaji wa data hazitachukua jina lako. Utatambuliwa na nambari maalum ya masomo. Watafiti tu ndio watakaotambua nambari yako ni nini na data iliyokusanywa itahifadhiwa chini ya ufunguo. Takwimu zote na habari inayopatikana wakati wa kusoma itatumika kwa kusudi la pekee la kufikia malengo ya utafiti.

Faida
Hakuna faida za moja kwa moja kwako kama mtu binafsi, hata hivyo, habari unayotoa itasaidia hospitali katika uundaji wa sera, na pia itawapa madaktari mwongozo wa jinsi ya kushughulikia mahitaji ya kihemko ya mlezi.

Je, kuwa katika utafiti huu unakupa gharam yoyote?
Hakuna gharama ya kifedha ikiwa utachagua kushiriki katika utafiti.
Hakuna faida ya kifedha ikiwa utachagua kushiriki katika utafiti.

Utafanya nini ukiwa una maswali baadaye?
Ikiwa una maswali zaidi au wasiwasi juu ya kushiriki katika utafiti huu, tafadhali piga simu au tuma ujumbe wa maandishi kwa wafanyikazi wa utafiti kwa nambari iliyotolewa chini ya ukurasa huu.
Kwa habari zaidi juu ya haki yako kama mshiriki wa utafiti, unaweza kuwasiliana na Katibu / Mwenyekiti, Hospitali ya Kitaifa ya Hospitali ya Kitaifa ya Chuo Kikuu cha maadili cha Kenya na Nambari ya 2726300 Ext. 44102 barua pepe uonknh_erc@uonbi.ac.ke.
Wafanyikazi wa masomo watakulipa kwa malipo yako kwa nambari hizi ikiwa simu ni ya mawasiliano yanayohusiana na masomo.

Je unauamuzi gani mbadala?
Uamuzi wako wa kushiriki katika utafiti ni wa hiari. Uko huru kukataa kushiriki katika masomo na unaweza kujiondoa kwenye masomo wakati wowote bila ukosefu wa haki au upotezaji wa faida yoyote.

Idhini Ya Mshiriki (Taarifa Ya Idhini)

Taarifa ya Mshiriki
Nimesoma fomu hii ya idhini au nimesomewa habari iliyomo. Nimepata nafasi ya kujadili utafiti huu na mshauri wa utafiti huu. Nimepata maswali yangu kujibiwa kwa lugha ambayo naelewa. Hatari na faida zimeelezwa kwangu. Ninaelewa kuwa ushiriki wangu katika utafiti huu ni wa hiari na kwamba naweza kuchagua kujiondoa wakati wowote. Nakubali kwa bure kushiriki katika utafiti huu.
Ninaelewa kuwa juhudi zote zitafanywa kuweka siri habari yangu ya kibinafsi. Kwa kusaini fomu hii ya idhini, sijapeana haki yoyote ya kisheria ambayo ninoya mimi kama mshiriki wa utafiti.

Nakubali kushiriki katika utafitii huu: Ndio….. La……

Jina la kuchapishwa la mshiriki:……
Sahihi/ Kidole gumba la mshiriki:……

Tarehe:……

Kauli ya Mtafiti
Ninaamini kwamba nimeelezea kikamilifu maelezo muhimu ya utafiti huu kwa mshiriki aliyetajwa hapo juu na ninaamini kwamba mshiriki ameelewa na ametoa ridhaa yake kwa hiari.

Jina la Mtafiti:…….

Tarehe:…….

Sahihi:…….

Ikiwa una maswali zaidi au wasiwasi juu ya kushiriki katika utafiti huu tafadhali wasiliana na mtafiti kwa namba 0727-496-074 au msimamizi wake, Dk. Kang’ethe. Unaweza pia kuwasiliana na KNH / UON-ERC kwa 276300 Ext 44102 barua pepe uonknh-erc@uonbi.ac

Wasiwasi na Huzuni, na Mikakati ya kujikinga kati ya Jamaa wa Wagonjwa katika Vituo vya Wagonjwa Hali Maututi katika Hospitali ya Kitaifa ya Kenyatta.

Tarehe: / / Nambari ya kisomo

Maagizo

1. Usiandike jina lako kwenye dodoso
2. Weka alama kwenye sanduku zilizotolewa mahali inapotumika
3. Kwa maswali yaliyomalizika wazi andika majibu katika nafasi iliyotolewa
4. Jibu maswali yote
5. Habari zote zilizopatikana zitabaki kuwa siri

Dodoso ya Jamii ya Idadi ya Watu

1. Una mika ngapi?
2. Jinsia yako ni gani? Kiume Kike
3. Je!Hali yako ya ndoa ni ipi? Sijaoleka Nmeoleka Talaka Mjane
4. Je! Kiwango chako cha elimu ni kipi? Sijasoma Msingi Sekondari Chuo kikuu
5. Je! Hali yako ya ajira ni ipi? Ninaajira Sinaajira
6. Je! Mgonjwa wako ana umri gani?
7. Je! Unajua hali ambayo mgonjwa wako anasumbuliwa nayo? Ndio La

   7.1. Ikiwa ndio, ni ugonjwa gani?.....
8. Je! Unahusiana vipi na mgonjwa?
   a) Mzazi
   b) Mke/Mme
   c) Ndugu
   d) Mtoto
9. Je!Umewahi kuwa na mpendwa aliyelazwa ICU hapo awali? Ndio La

   9.1 Kama ndio: a) ilikua lini?

   b) umekua na mgonjwa amelazwa ICU mara ngapi?

   c) hatma ya mgonjwa ilikua gani? ALIPONA ALIAGA
10. Je! Umeorodheshwa kama jamaa / mwenye kutoa uamuzi kwa niaba ya mgonjwa? NDIO LA

11. Je! Mgonjwa ameugua kwa mda gani kabla ya kupelekwa ICU? MFUPI(Chini ya siku 14) MREFU(Zaidi ya siku 14)
12. Je! Wewe ndiye umekua ukimuuguza mgonjwa kabla aje hospitalini? Ndio La
13. Je! Mgonjwa amelazwa ICU kwa mda gani?

    Chini ya siku 14

    Zaidi ya siku 14

14. Je! Umeridhika na habari uliyopewa na Madaktari / Wauguzi kuhusu jinsi mgonjwa wako anavyoendelea? Ndio La

SWAHILI HADS-A

Punga kisanduku kando na jibu ambalo ni karibu na jinsi umekuwa ukisikia katika wiki iliyopita.Usichukue muda mrefu juu ya majibu yako, ya haraka ni bora.

Ninahisi mchovu au mzito		
Kila wakati	3	
Wakati mwingi	2	
Mara kwa mara	1	
Hapana kabisa	0	
Ninapata aina ya kuhisi kana kwamba kuna kitu kibaya kinakaribia kutokea		
Hakika na mbaya kabisa	3	
Ndio, lakini sio mbaya sana	2	
Kidogo, lakini hainisumbui	1	
Hapana kabisa	0	
Mawazo ya wasiwasi hupitia akili yangu		
Kwa wakati mwingi sana	3	
Wakati mwingi	2	
Mara kwa mara, lakini sio mara nyingi sana	1	
Hapana kabisa	0	
Naweza kukaa kwa raha na nahisi nimetulia		
Kwa kweli	0	
Kawaida	1	
Si mara nyingi	2	
Hapana kabisa	3	
Napata aina ya hisia za kutisha kama vipepeo kwenye tumbo		
Hapana kabisa	0	
Wakati mwingine	1	
Mara kwa mara	2	
Mara nyingi sana	3	
Ninahisi kutokuwa na utulivu kana kwamba lazima niwe safarini		
Mara nyingi sana	3	
Sana sana	2	
Sio sana	1	
Hapana kabisa	0	
Napata hisia za ghafla za hofu		
Mara nyingi sana kweli	3	
Mara kwa mara	2	
Sio sana	1	
Hapana kabisa	0	

SWAHILI HADS-D

Punga kisanduku kando na jibu ambalo ni karibu na jinsi umekuwa ukisikia katika wiki iliyopita.

Usichukue muda mrefu juu ya majibu yako, ya haraka ni bora.

Bado ninafurahiya vitu ambavyo nilikuwa nikifurahia		
Dhahiri sana	0	
Sio kabisa	1	
Kidogo tu	2	
Hapana kabisa	3	
Ninaweza kucheka na kuona upande wa mambo wa kuchekesha		
Kwa kadiri nilivyoweza siku zote	0	
Sio kabisa sasa	1	
Kwa kweli sio sana sasa	2	
Hapana kabisa	3	
Ninajisikia mwenye furaha		
Hapana kabisa	3	
Si mara nyingi	2	
Wakati mwingine	1	
Wakati mwingi	0	
Ninahisi kama nimepunguzwa mwendo		
Karibu wakati wote	3	
Mara kwa mara	2	
Wakati mwingine	1	
Hapana kabisa	0	
Nimepoteza hamu na sura yangu		
Kwa kweli	3	
Sijijali sana kama ninavyopaswa	2	
Naeza kosa kujiangalia vizuri	1	
Mimi hujitunza vizuri tu kama zamani	0	
Natarajia vitu kwa furaha na uchangamfu		
Kama vile ninavyofanya kwa kawaida	0	
Chini kuliko kawaida	1	
Dhahiri kidogo kuliko nilivyokuwa	2	
Hapana kabisa	3	
Naweza kufurahia kitabu kizuri, redio au kipindi cha runinga		
Mara nyingi	0	
Mara nyingine	1	
Si mara nyingi	2	
Mara chache sana	3	

F-COPES
FAMILY CRISIS ORIENTED PERSONAL EVALUATION SCALES
(SWAHILI VERSION)

Kusudi
Mizani ya Tathmini ya Kibinafsi ya Mgogoro wa Familia imeundwa kurekodi utatuzi wa shida, mitazamo na tabia ambazo familia huendeleza ili kujibu shida au shida.

Maagizo
Kwanza, soma orodha ya "Chaguo za Kujibu" moja kwa wakati mmoja.
Pili, amua jinsi kila taarifa inaelezea mitazamo yako na tabia yako kukabiliana na shida au shida. Ikiwa taarifa inaelezea majibu yako vizuri, basi zunguka nambari ya 5 inayoonyesha kuwa unakubali sana; ikiwa taarifa haielezei majibu yako hata kidogo, kisha zungusha nambari ya 1 inayoonyesha kuwa haukubaliani kabisa; ikiwa taarifa inaelezea majibu yako kwa kiwango fulani, chagua nambari 2, 3, au 4 kuashiria ni kiasi gani unakubaliana au haukubaliani na taarifa kuhusu majibu yako.

Tafadhali zunguka nambari (1, 2, 3, 4, au 5) ili kulinganisha majibu yako na kila taarifa. Asante.

Tunapokumbana na shida katika familia yetu tunajibu:	**Sikubakiani kabisa**	**Sikubaliani kiasi**	**Sikubali Wala sikatai**	**Nakubaliana kiasi**	**Nakubali sana**
1. Kushiriki shida zetu na jamaa	1	2	3	4	5
2. Kutafuta kutiwa moyo na msaada kutoka kwa marafiki	1	2	3	4	5
3. Kujua tuna nguvu ya kutatua shida kubwa	1	2	3	4	5
4. Kutafuta habari na ushauri kutoka kwa mtu katika familia zingine ambaye amekabiliwa na shida zinazofanana na zetu	1	2	3	4	5
5. Kutafuta ushauri kutoka kwa jamaa (babu, n.k.)	1	2	3	4	5
6. Kutafuta msaada kutoka kwa mashirika ya jamii na mipango iliyoundwa kusaidia familia katika hali yetu	1	2	3	4	5
7. Kujua kuwa tuna nguvu na familia yetu wenyewe kutatua shida zetu	1	2	3	4	5
8. Kupokea zawadi na neema kutoka kwa majirani (k.v. chakula, kuchukua barua, nk)	1	2	3	4	5
9. Kutafuta habari na ushauri kutoka kwa daktari wa familia	1	2	3	4	5
10. Kuuliza majirani kwa neema na msaada	1	2	3	4	5
11. Kukabili shida "ana kwa ana" na kujaribu kupata suluhisho mara moja	1	2	3	4	5
12. Kuangalia runinga	1	2	3	4	5
13. Kuonyesha kuwa tuna nguvu	1	2	3	4	5
14. Kuhudhuria huduma za kanisa	1	2	3	4	5
15. Kukubali matukio yanayokusumbua kama ukweli wa maisha	1	2	3	4	5

16. Kushiriki wasiwasi na marafiki wa karibu	1	2	3	4	5
17. Kujua bahati kunasaidia sana jinsi tunavyoweza kutatua shida za familia	1	2	3	4	5
18. Kufanya mazoezi na marafiki ili kukaa sawa na kupunguza hisia za uzito	1	2	3	4	5
19. Kukubali shida hutokea bila kutarajia/ghafla	1	2	3	4	5
20. Kufanya vitu na jamaa (kukusanyika pamoja, chakula cha jioni, nk)	1	2	3	4	5
21. Kutafuta ushauri wa kitaalam na msaada kwa shida za kifamilia	1	2	3	4	5
22. Kuamini tunaweza kutatua shida zetu wenyewe	1	2	3	4	5
23. Kushiriki katika shughuli za kanisa	1	2	3	4	5
24. Kuelezea shida ya kifamilia kwa njia chanya zaidi ili tusije tukakata tamaa	1	2	3	4	5
25. Kuuliza jamaa wanahisi vipi kuhusu shida tunazokabili	1	2	3	4	5
26. Kuhisi kwamba haijalishi tunafanya nini kuandaa, tutakuwa na ugumu wa kushughulikia shida	1	2	3	4	5
27. Kutafuta ushauri kutoka kwa mhubiri	1	2	3	4	5
28. Kuamini ikiwa tunasubiri muda wa kutosha, shida itaondoka	1	2	3	4	5
29. Kushiriki shida na majirani	1	2	3	4	5
30. Kuwa na imani kwa Mungu	1	2	3	4	5