

**COMPASSION FATIGUE:  
A STUDY AMONG THE STAFF WORKING  
AT THE CRITICAL CARE AREAS OF  
KENYATTA NATIONAL HOSPITAL  
NAIROBI, KENYA**

**DISSERTATION PRESENTED AS  
PART OF FULFILLMENT FOR THE A WARD  
OF A MASTER OF SCIENCE IN CLINICAL  
PSYCHOLOGY UNIVERSITY OF NAIROBI  
BY  
JOHN KARIRI**

**BACHELOR OF PSYCHOLOGY  
(COUNSELING) DEPARTMENT OF  
PSYCHIATRY UNIVERSITY OF NAIROBI  
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Candidate

Signed .....  .....

Date.....15-2-08.....

JOHN KARIRI

## APPROVAL OF SUPERVISORS

This Dissertation has been submitted for the award of the Degree of the Master of Science in Clinical Psychology University of Nairobi.

1. Professor David Musyimi Ndetei

Signature .....

Date .....

15<sup>th</sup> Feb. 2008

MBChB (NRb), D.P.M. (London)

F.R.C. Psych (U.K.), NRB

PROFESSOR OF PSYCHIATRY

UNIVERSITY OF NAIROBI

DR. LINCON I. KHASAKHALA

Signature .....

Date .....

15/2/08

MBChB (NAIROBI) MSC

CLINICAL PSYCHOLOGY

HONARARY LECTURER

DEPARTMENT OF PSYCHIATRY

UNIVERSITY OF NAIROBI

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Last but not the least, the management of Kenyatta national hospital for allowing me to do the study in this great institution.

## DEDICATION

This dissertation is dedicated to my mother Eddah Wamboi, my wife Mary Njeri and my son Joseph Mukui for their support through out the period of my study.

May God bless you all.

## ACRONYMS AND ABBREVIATION

BSC	- Bachelor of science
DAN	- Diploma in advance nursing
Dr	- Doctor
DSMIV-TR	- Diagnostic and statistical manual of mental disorder VI-Test revised
ECU	- Enrolled community nurse
ICU	- Intensive care unit
KNH	- Kenyatta national hospital
KRN	- Kenya registered nurse
Mmed	- Master of medicine
MOH	- Ministry of health
MSC	- Master of science
PHD	- Doctor of philosophy
PSC	- Patient support center
PTSD	- Post traumatic stress disorders
SOPC	- Surgical out patient clinic
SPSS	- Statistical package of social scientist
UK	- United kingdom
USA	- United state of America

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## ABSTRACT

### **Objective**

The objective of this study was to determine the prevalence of compassion fatigue among the critical area workers of Kenyatta National Hospital, Nairobi, Kenya.

### **Design**

This was a descriptive cross sectional study.

### **Outcome measures**

The prevalence rates, social demographic characteristics, factors associated with compassion fatigue.

### **Procedure**

This was purposeful sampling study where all the categories of staffs working in the critical care areas were included.

### **Results**

The prevalence rate of compassion fatigue was found to be 74.4%.

The risk factors associated with compassion fatigue were being young with those between 26 – 35 found to have the highest rate of compassion fatigue. Being married the rate of compassion fatigue increased from 22.2% for high risk to 51% for the extremely high risk. Being a protestant Christian the rate of compassion fatigue increased from 14.7% to 58.7% for those with high to extremely high risk of compassion fatigue. Working in the intensive care unit, those working in intensive care had compassion fatigue increasing from 17.2% from high to extremely high 51.9%. Those with college diplomas from medical training colleges were also found to suffer from fatigue ranging from 19.4% to 55.8% for high to extremely high. Others found to have high level of fatigue were those who were willing to change the department, where the level of compassion fatigue increased from 17.2% and 65.5% for those with high and extremely high respectively.

The protective factor identified in this study was only the period of work. Those who had worked for more years had less compassion fatigue.

## CHAPTER ONE 1.0

### 1.1 INTRODUCTION

Compassion fatigue is sometimes known as "vicarious trauma or secondary traumatic stress" which affects people who are exposed continuously to suffering of others. Figley (1995) defined compassion fatigue as a secondary traumatic event (1,2,3).

Caring for very sick patients induces considerable stresses which include the challenges of providing comfort care to patients with complex disease process as well as being empathic in psychosocial and spiritual crisis (Kube, 2001). Compassion fatigue results are the consequences of relationship with the traumatized client during long term individual therapy.(2,5,6).The worker experiences a disruption in central schema and intimacy. Compassion fatigue is a form of occupational stress, resulting from over extended exposure to trauma of survivors. In a study among social workers (Cornillie and Mayer, 1999,(7,6). Dalton 2001) found that 38% of all social workers are at risk of compassion fatigue. Other workers who are at risk are emergency workers (Laceca 1996, Heinrich and Ehlor 1998) Nurses, (Janson, 1992) Police officers (Folette, Polusing and Milbeck, 1994) and trauma therapists (Chrestman 1995).

There are several factors, which are involved in the development of compassion fatigue; the exposures to traumatic materials have been found to be important predictors in the development of compassion fatigue. Compassion fatigue results from the professional being committed to helping the suffering person or he or she cannot shy away from the painful encounters and allows personal reaction to interfere with the job at hand.(5,6,8) The emotional experience by the professional is real and often strong and must be dealt with constructively. The emotional pain is not dealt with in almost all cases because it is hindered by the fact that during professional training, the medical caregivers are not trained in advance to handle their own emotional reaction to traumas (8).

The signs and symptoms of compassion fatigue resemble those of direct trauma, though they are not always a mirror image of the clients. Ochbery (2002) said that compassion

fatigue happens when the "milk of human kindness dries up". The worker forgets why he wanted to help (10).

The people affected are those who have encountered trauma survivors in their work and approach their responsibilities with empathy and sincerity. There are many professionals who are at risk of developing compassion fatigue through their contact with traumatized people or materials that contains graphic images of trauma (Cornillie and Mayers, 1999).

Numerous studies have cited the effect of compassion fatigue in disciplines such as psychology, religious ministry, emergency management, and veterinary medicine (Davis, 2003, McCann and Pearlman, 1990, Roberts, Flannely, Weaver and Figley, 2003, and Wastell, 2002).

The effect of compassion fatigue can have multiple negative effects on individual as well as his or her work with client. If the compassion fatigue is not recognized, the professionals became ineffective, have trouble with boundaries or relationship, withdraw from friends and colleagues and have bad judgment in their work. These experiences may make them became a burden to colleagues or leave the field prematurely.(12,25)

### **1.1.1 BACKGROUND**

The concept of compassion fatigue has been around since 1992 when Joison (1992) used the term in a nursing magazine. This term fits the description of nurses who are worn down by their dairy hospital emergencies.

The dictionary meaning of compassion fatigue according to Webster (1989) is a feeling of deep sympathy and sorrow for another person who is stricken by the suffering or misfortune accompanied by a strong desire to alleviate the pain or remove the cause.

### **1.1.1 SIGNS AND SYMPTOMS**

Compassion fatigue has many symptoms and often parallel to the symptoms of the traumatized client with whom caregivers are working.(1,2,3,5).

There is also growing evidence to support Tran-generation and society transmission of this condition (Daniel, 1985, Baranously 1997; Bloom, 1997)

### **1.1.2 SOME OF THE SYMPTOMS OF COMPASSION FATIGUE INCLUDES:**

- ❖ Increased negative arousal
- ❖ Intrusive thought (or, clinicians own historical traumas)
- ❖ Difficult separating work life from personal life
- ❖ Dread of working with certain clients
- ❖ Marked or increased transferences/ counter-transference issues with certain clients
- ❖ Depression,
- ❖ Perceptive / “assumptive world disturbance for example seeing the world in terms of victims and perpetrator, decrease in subjective sense of safety,
- ❖ Increase in ineffective / and or self –destructive self- soothing behaviors
- ❖ Hypervigilance,
- ❖ Feeling of therapeutic impotence or de-skilled with certain clients
- ❖ Decreased function in none professional situations
- ❖ Loss of hope

### **1.1.3 Other symptoms which could signal the presence of compassion fatigue include:**

- ❖ The eruption of violence, personal degradation and physical/psychological violations (Janoff – Bullman, 1992; Rando, 1996)

Such trauma can result to symptoms of posttraumatic stress disorder, which include

- ❖ Intrusive thoughts, images and sensations
- ❖ Avoidance of people, places, things and experiences, which elicit memories of traumatic experiences
- ❖ Negative arousal in the form of hypervigilance; sleep disturbance, irritability and anxiety.

## CHAPTER TWO 2.0

### 2.1 LITERATURE REVIEW

A study conducted by Dea (1998) in Canada to assess factors associated with compassion fatigue among hospice nurses showed that 42% ranked management of intractable symptoms the highest while 50% ranked communication issue second highest.

In a Cohort study (2003) conducted among social workers in the U.S.A to assess chronic fatigue syndrome showed that UN explained fatigue is a precursor of development of chronic fatigue syndrome. (8,13).

In Columbia (2003) a study to assess the level of trauma and burn out among mental health professionals and the attorneys, showed that the attorneys were at a higher risk of developing secondary trauma when compared with mental health professionals. (14).

Washer (1998) in a Germany study found that health professionals were at risk of developing post-traumatic stress disorder, as 18.2% developed the P.T.S.D symptoms.

In a study carried out by Coinad Cameroon in Australasia (2003) to assess the level of compassion fatigue among emergence medical workers, showed that 71.8% had a high level of emotional exhaustion and 69.9% had high level of depersonalization, and 26.8% of the workers felt an urge to stop working in the emergency areas. (18).

Adkinson et al (2003) in Canada assessed the level of compassion fatigue among public health nurses working on Disaster relief teams. They found that compassion fatigue could be a precursor of burn out.

Other findings of the study were that; long working hours, unusual strenuous conditions including working 12 hours shift predisposes the nurses to compassion fatigue.

A study of secondary trauma among New York City social workers by Bascorino et al (2003) indicated that the social workers had a high level of trauma ( $P < 1001$ ) (5,16,25).

In Israel (2006) a study to assess the level of compassion fatigue among social workers, who had participated in the caring of victim of multiple terrorist suggested social workers needed some debriefing after attending to the victims (10,11,25).

A study carried out by Harry (2000) among 328 physicians in the USA to assess psychiatric morbidities and burn out syndrome in the medical professions, found a global



psychiatric morbidity of 22.3%, and emotional exhaustion and depersonalization of 27.5% and 25.6% respectively.

In England (2000), a study to assess the relationship between stress (Hasslers) and burn out syndrome on 30 family caregivers, found that the family caregivers experienced stress and thus could lead them to develop burn out syndrome.

In a seminar, Maslach (1982) in USA identifies several factors that contribute to burnout; some of the factors were; working with families in crisis, receiving little positive feedback, and demanding workload.

UM and Harrison (1998) did a study on process that triggers burn out and job dissatisfaction among social workers in USA, and found that role conflict increases the amount of burn out and job dissatisfaction (17,18,25)

A study of compassion fatigue among 236 social workers following the September 11 terrorist attack in America, the results reviewed that the social workers suffered from secondary traumatic stress and needed help (10,12,14,27).

Maytum J.C and Helme (2004) study on compassion fatigue and burnout among 20 nurses who worked with children with chronic condition and their families. The study found that, the nurses adopted short-term strategies to minimize and manage compassion fatigue. This included identification of compassion fatigue and developing a range of coping strategies and support system to revitalize their compassion and minimize the risks of burn out (5,12,25).

### **2.1.1 STUDIES ON COMPASSION FATIGUE IN AFRICA**

In a study done by Leve (1995) in South Africa based on data analysis of 132 marriage therapists in South Africa, the result of the study were that marriage and family therapist professions experienced compassion fatigue that was higher than the medical students (20,25,26) The above study agreed with another study carried out in the same country by (Pelkopwitz, 1997), to assess the level of compassion fatigue among nurses working with prisoners. The results of the study were that the nurses working in the traumatic unit in South Africa were vulnerable to compassion fatigue (5,13,25).

In an exhaustive review of professional literature in South Africa, Bectom and Murphy (1995) asserted that emergency or first responders and crisis workers absorb traumatic stress and are at a risk of experiencing compassion fatigue. This resulted to negative consequences that were often linked to their work. These consequences include substance abuse and relationship conflicts. The review agreed with the finding of MC comm and Jackson (1995) in South Africa who reviewed the emergency medical profession and found that they had high level of compassion fatigue, predisposing them to substances abuse.

### **2.1.2 STUDIES IN KENYA:**

A study carried out at Kenyatta National Hospital by Kokonya (2004) assessed the burnout syndrome and compassion fatigue among medical practitioners. The study results were that 29.6% suffered from compassion fatigue while 94.5% suffered from burnout.

Mbatha (2006) in a related study of vicarious traumatization among caretakers of Kakuma refugee camp found that 37% experienced vicarious trauma (14,16,19,22).

## **CHAPTER THREE 3.0**

### **3.1 PROBLEM STATEMENT**

Compassion fatigue occurs due to the impact of seeing everyday the faces of peoples who are suffering and only minimum help is available. It affects people who are exposed to the traumatic suffering for others. The people included in this category include, doctors, nurses, emergency service personnel's, counselors, social workers and clergy members.(5,7,10). This study is designed to find out the extent of compassion fatigue among the staff working in the critical areas of Kenyatta National hospital. The staff working in these areas is exposed to recurrent trauma due to the nature of their work and types of patients admitted in these units. The intensive care unit workers are exposed to very sick patients; some who are on life saving machines, while staffs in the burns unit are exposed to patients who have severe burns and need extensive dressing and possible saline baths. The renal unit staff is exposed to patients who have end stage renal failure and most of who are on either peritoneal dialysis or on haemodialysis. The level of compassion fatigues among staff working in the above units has not been known.

### **3.2 PURPOSE OF THE STUDY**

The purpose of the study is to determine the extent of compassion fatigue among the critical care area workers. This will help the institution (K.N.H) to come up with intervention measures of improving the quality of life for the workers and hence improve the quality of care to the patients.

### **3.3 JUSTIFICATION**

The critical care area workers admit emergency patients who have been referred in very critical condition to the hospital. The Kenyan medical workers are always inadequate due to freezing of employment of medical workers. This study seeks to determine the extent of compassion fatigue among the critical care area workers of Kenyatta National Hospital. The results of this study will be used as baseline information for intervention and promotion of the welfare of staff working in these units. This study will bring new insight to the levels of compassion fatigue amongst workers with the potential for improvement of patient care.

### **3.4 General objective**

To determine the prevalence of compassion fatigue among the critical care area workers, Kenyatta National Hospital.

#### **3.4.1 Specific objectives**

- To determine the social demographic factors associated with compassion fatigue.
- To determine the prevalence of compassion fatigue among staff working at the critical care areas of Kenyatta National Hospital
- To compare and contrast levels of compassion fatigue in staff in the three different units: burns, renal, and I.C.U.
- To compare the occurrence of compassion fatigue in the different cadres of staff.

### **3.5 Expected Outcomes**

The study will produce the prevalence rate and factors influencing compassion fatigue among critical care area workers of Kenyatta National Hospital.

The study will also create a baseline for intervention and form a base for other studies in this area.

### **3.6 HYPOTHESIS**

#### **3.6.1 Null hypothesis**

The staffs working in the critical care areas do not suffer from compassion fatigue.

#### **3.6.2 Alternative hypothesis**

The staffs working at the critical care areas suffer from compassion fatigue.

## CHAPTER FOUR 4.0

### 4.1 METHODOLOGY

#### 4.2 Study design

This is a descriptive cross sectional study that evaluated compassion fatigue among staffs working at critical care areas of Kenyatta National Hospital Nairobi Kenya.

#### 4.3 STUDY SETTING

Kenyatta National Hospital is located in the capital city, Nairobi of the Republic of Kenya. The hospital caters for patients who have been referred for specialized care. This type of care includes medical and surgical care. The hospital also serves as a referral hospital for other Sub- Saharan Countries. Critical care areas of Kenyatta National Hospital include the burns unit, the intensive care unit and the renal unit. These areas receive critical patients, requiring specialized care. Some of the patients admitted in these units include severely burned patients, complicated cardiac patients and renal patients. Other special patients admitted are those who have undergone open-heart surgery and renal transplant.

#### 4.4 The study population

Staffs working at the critical care area of the hospital.

The categories of the staffs include, doctors, nurses, physiotherapist, laboratory technologist, , nutritionists ,medical engineering technicians and supportive staffs.

##### 4.4.1 Staff distribution

Intensive care unit.....	120
Burns unit.....	50
Renal unit.....	40

#### 4.5 Inclusion criteria

- Employee of Kenyatta National Hospital critical care areas (burns unit, intensive care unit and renal unit).
- The staffs that will have given consent to participate in the study.
- Those who are currently working in these areas.

##### 4.5.1 Exclusion criteria

- Those who will not have given consent to participate.
- Those who will be on leave during the data collecting period.

#### 4.6 Study instruments

Two study instruments were used. A social demographic questionnaire, which was self-administered and had 21 items. The other tool was the compassion fatigue self test which had 40 items. The instrument was developed by figley and stamm (27). The population suitable for this instrument includes medical profession, psychotherapists, teachers and public safety personnel. This tool has been used internationally to access level of compassion fatigue among many populations. It has been adopted from Professor David Musyimi Ndeti who has full permission of using the tool from the author.

#### 4.7 Data interpretation

Each participant respondent to all items in questioner for analysis

##### 4.7.1 Scoring for compassion fatigue

The scoring were as follows:

Level of risk	Score
Extremely low	26 or less
Low	27 – 30
Moderate	31 – 35
High	36 – 40
Extremely high	41 or more

The only responses which were considered to be or pathological significant in this study were the high and extremely high. The moderate level of compassion fatigue was taken as the point of reference and hence signifies the normal.

#### 4.8 Procedure for data collection

A pretest was carried out on part of the study population to assess the feasibility of the study. This was done three weeks before the actual data was done. At this point the staffs were found to be very busy and involved. The Incharge of the critical care area units advise the researcher to give the questioners during the time when the staffs are little bit free especially during the tea break and before the staffs changes shifts.

The staffs were found to be having three shifts of work and the researcher had to feat in their schedule. The researcher used to report early in the data collecting areas in order to be introduced by the Incharge to the staff. The questionnaires were simple through same staff asked for clarification in same areas in compassion fatigue questionnaire.

Some staff requested to take their questionnaire home, but majority filled the questionnaire on the sport. The collection of data was done in systematic way. The first area where data was collected was the intensive care unit, this was followed by burns unit and later the renal unit. At time the researcher would wait for night staff. The data collection process was carried out making sure that the working process was not interfered with and with recognition that the hospital operates at certain rules and regulations.

All the completed questionnaires were immediately collected by the researcher and put in a bag for safety. The staff who requested for more time to fill the questionnaire were asked to deposit them at nursing officer office, however the researcher carried their mobile number for reminding them about the questionnaire.

The filled questionnaires were scrutinized to ensure that they were correctly filled. Those questionnaires, which were in complete, were discarded. The questionnaires were kept safely for data entry and data analysis.

#### **4.9 Data analysis**

Descriptive and influential analysis was done on the following, social demographic profiles of the staffs working at critical care areas and compassion fatigue questionnaire. The package used for data analysis was SPSS package in the computer soft ware version 11.5. The analysis was done to answer the questions asked in the questionnaire in order to prove or disapprove the hypothesis.

#### **4.10 Data presentation**

The data was presented in narratives, pie charts, bar charts and tables.

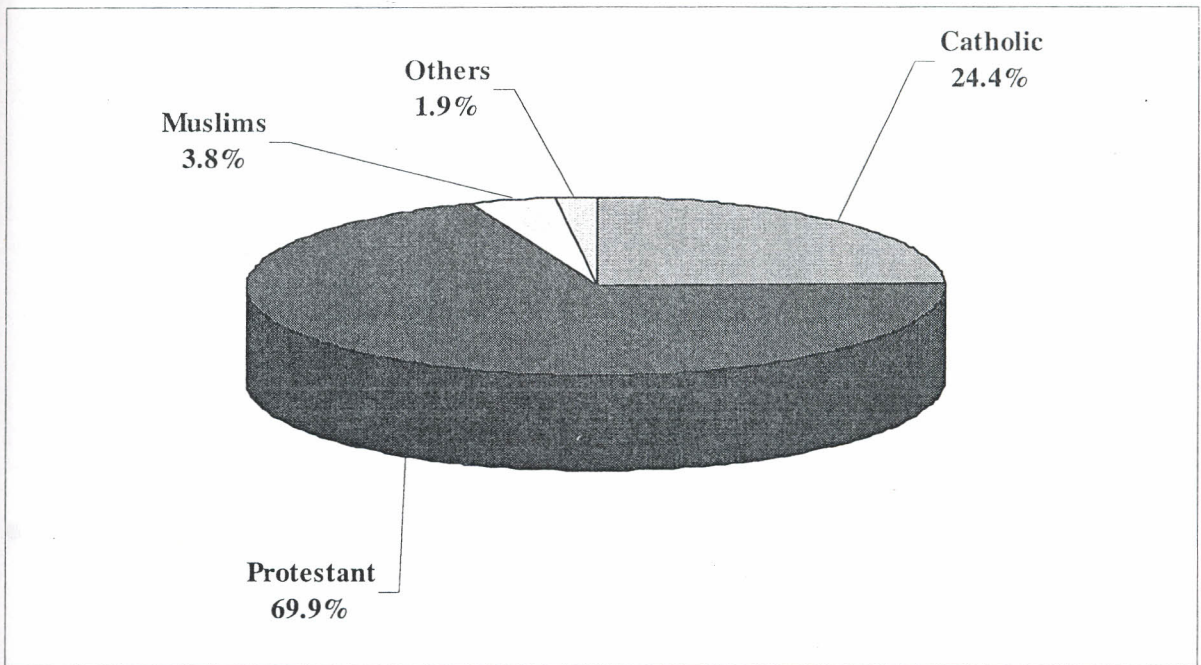
#### **4.11 Ethical consideration**

The study observed the participants' confidentiality and privacy. This is a requirement of ethical and research committee of Kenyatta National Hospital. This was done in order to adhere to regulation governing the institution and avoiding compromising the patient's care

## CHAPTER FIVE 5.0

### 5.1 RESULTS

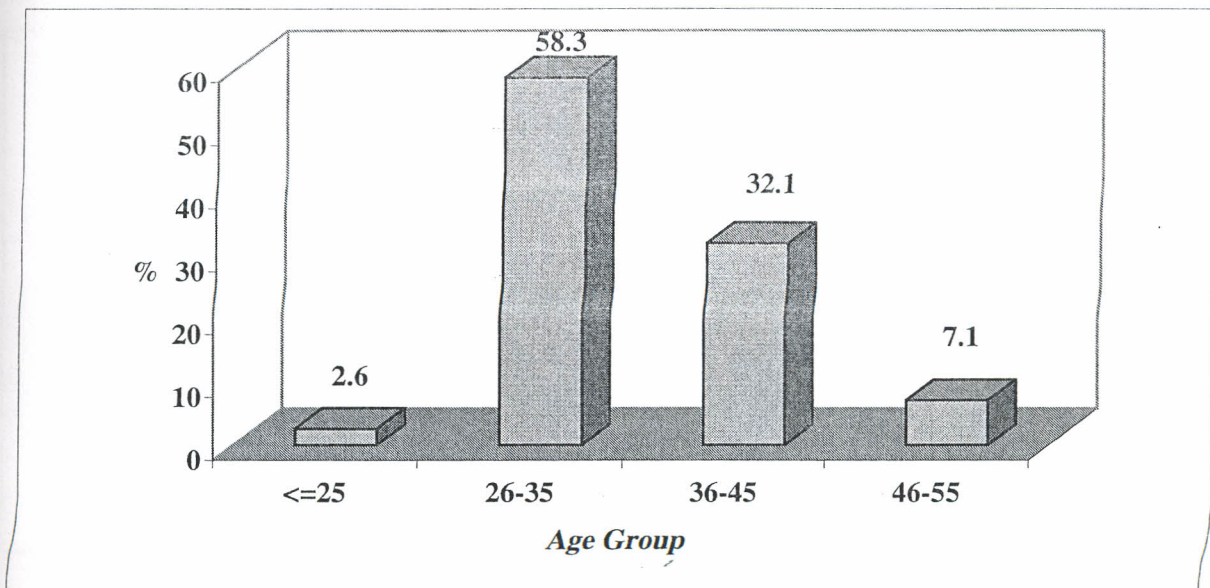
Chart 1: Religion



- Majority of respondents were Protestants 69% followed by Catholics who formed 24.4%. Those with others were 1.9%.

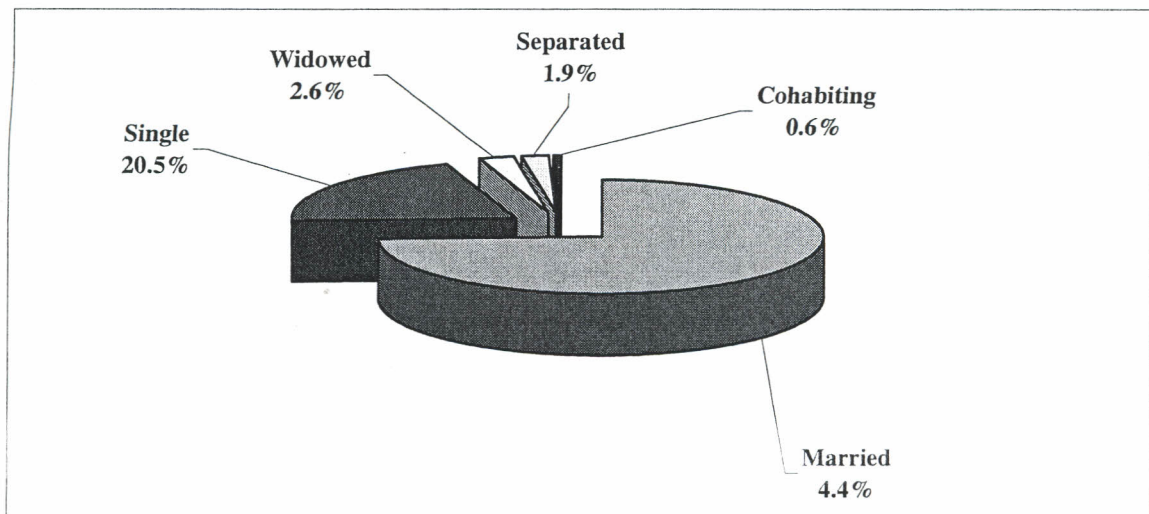


**Chart 2: Age Group**



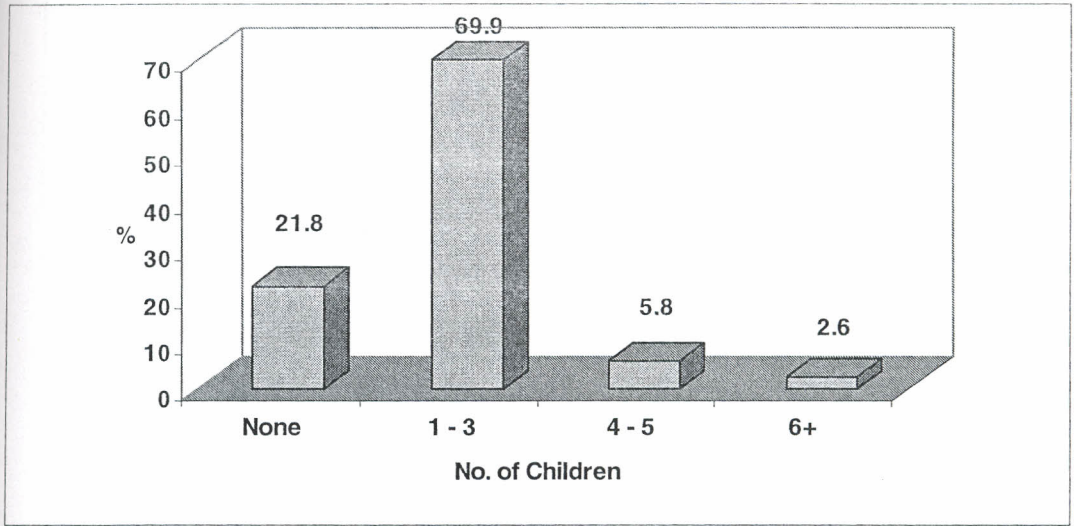
- Majority of respondents were between the ages of 26-35 forming 58.3%. They were followed by those between age 36-45 forming 31%. Those below age 25 had 2.6% while those between 46-55 were 7.1%

**Chart 3: Marital status**



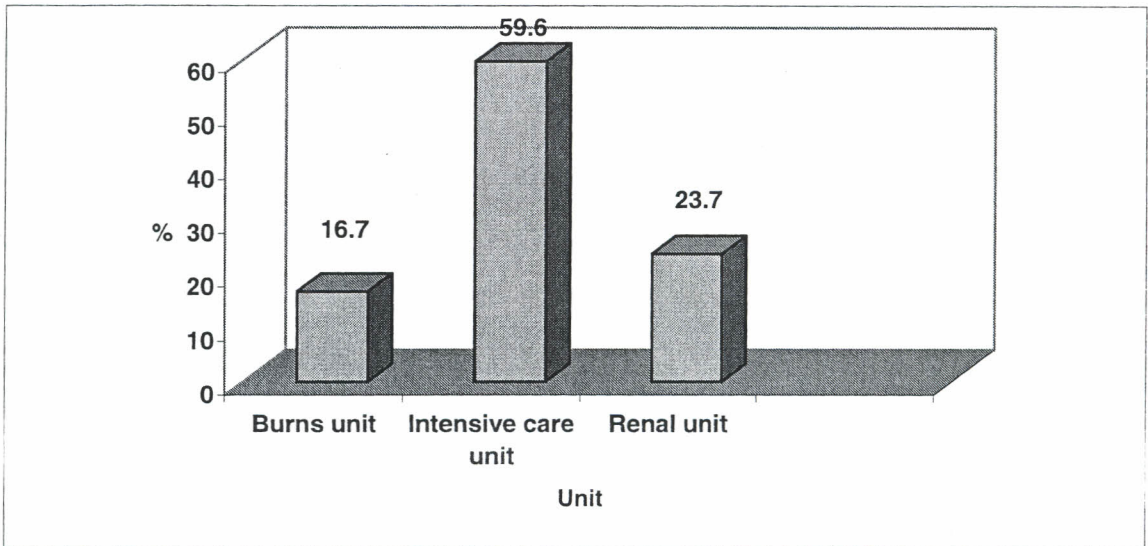
- Those of the respondents who were married formed 74.4% while those who were single formed 20.5%. The widowed, separated and cohabiting had 2.6%, 1.9% and 0.6% respectively.

**Chart 4: Number of children**



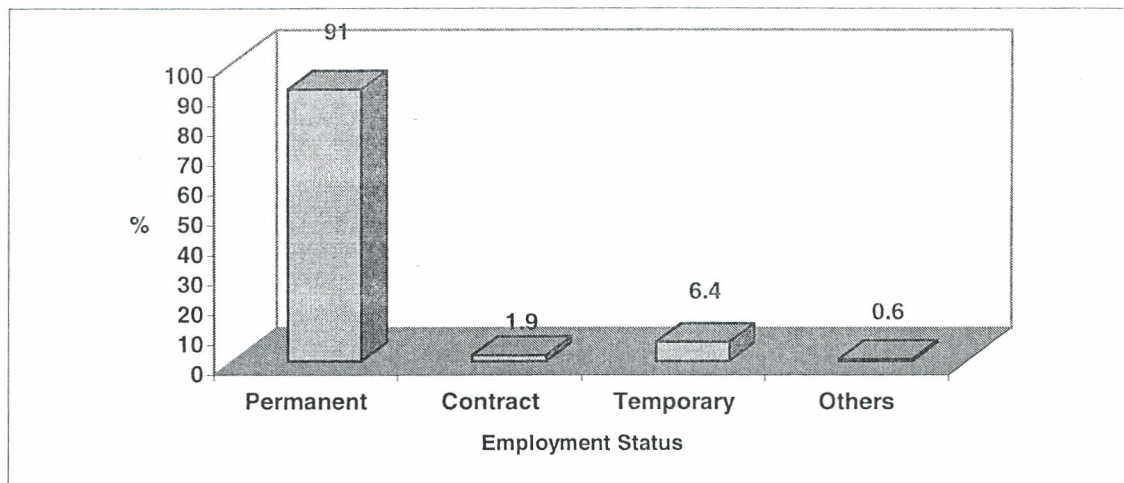
- Majority of respondents had between 1-3 children forming 69.9% they were followed by those with no children who had 21.8%. Those with 4-5 had 4.8% while those with above 6 children formed 2.6% of the respondents.

**Chart 5: Unit of Work**



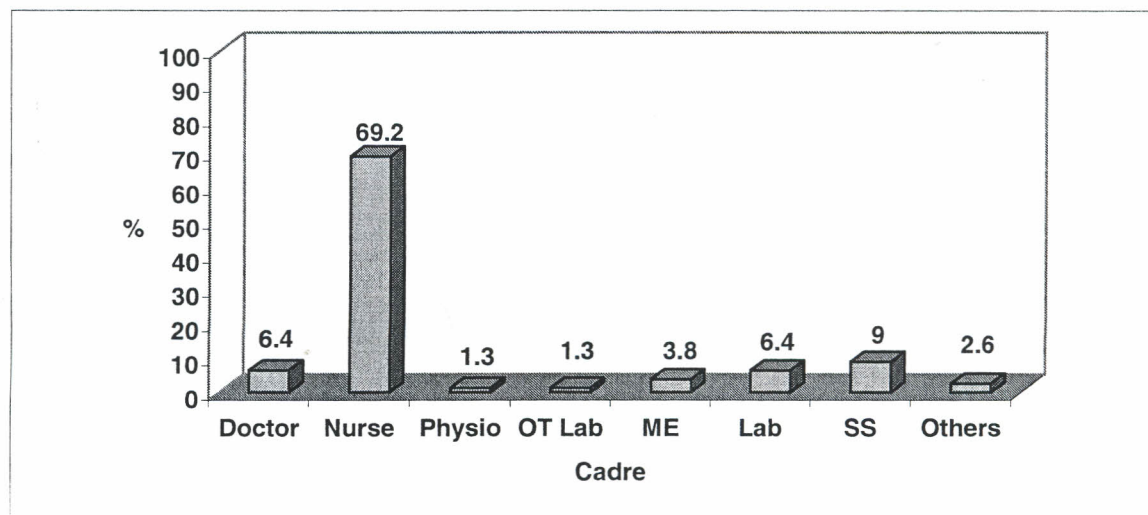
- Majority of the respondents worked in the intensive care unit forming 59.6% of the respondents; renal unit 23.7% followed them while 16.7% worked at the burns unit.

**Chart 6: Employment Status**



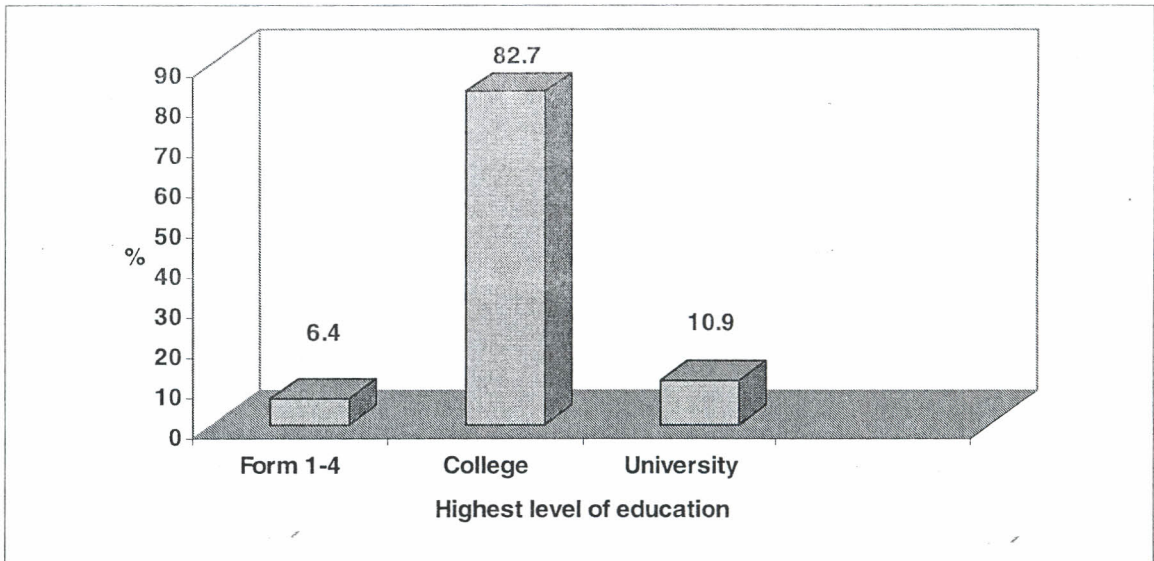
- Majority of the respondents are employed permanently by the hospital with 91% while other mode of employment include contract, temporary, and others with 1.9%, 6.4% and 0.6% respectively.

**Chart 7: Profession of staff**



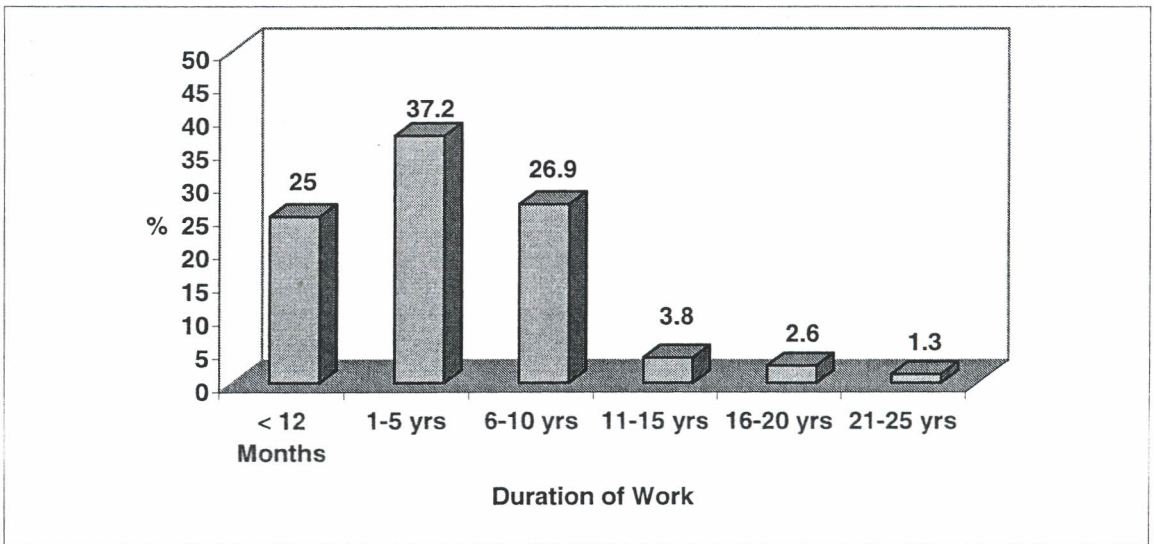
- Majority of the respondents were nurses who were 108 and formed 69.2% of the respondents. Support staff 9.0% and Doctors 6.4% followed them. Other staff included physiotherapists, occupational therapists, medical engineering and Laboratory staff who had 1.3%, 1.3%, 3.8%, 6.4% and others 2.6% respectively.

**Chart 8: Highest level of education**



- Majority of the respondents had undergone college training 82.7% followed by University 10.9% while 6.4% had reached form IV.

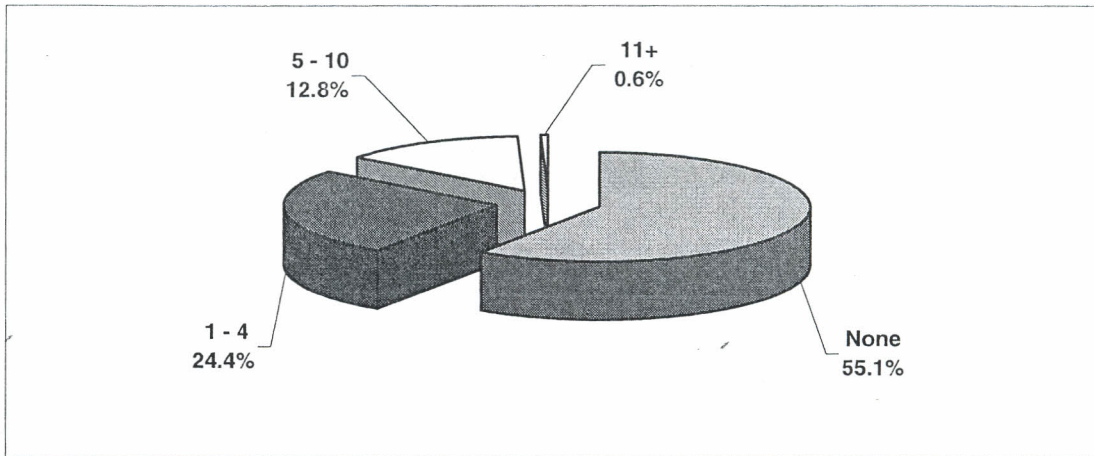
**Chart 9: Duration of Work**



- Majority of the respondents had worked between 1-5 years forming 32.7% of the respondents followed by those who had worked between 6-10 years with 26.9%.

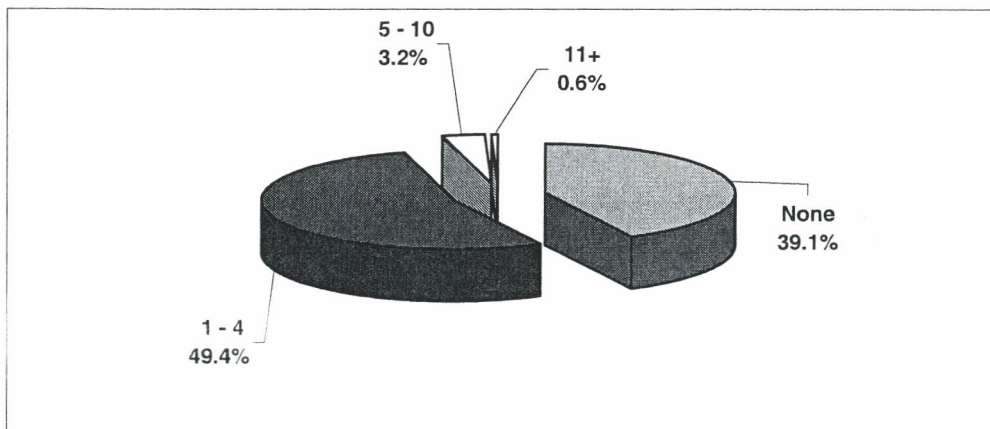
Those who had worked for less than 12 months formed 26.7% of the respondents. Others had worked between 11-15 yrs, 16-20 yrs, 21-25 yrs and formed 3.6%, 2.6% and 1.3% respectively.

**Chart 10: Extra working hours on average per day**



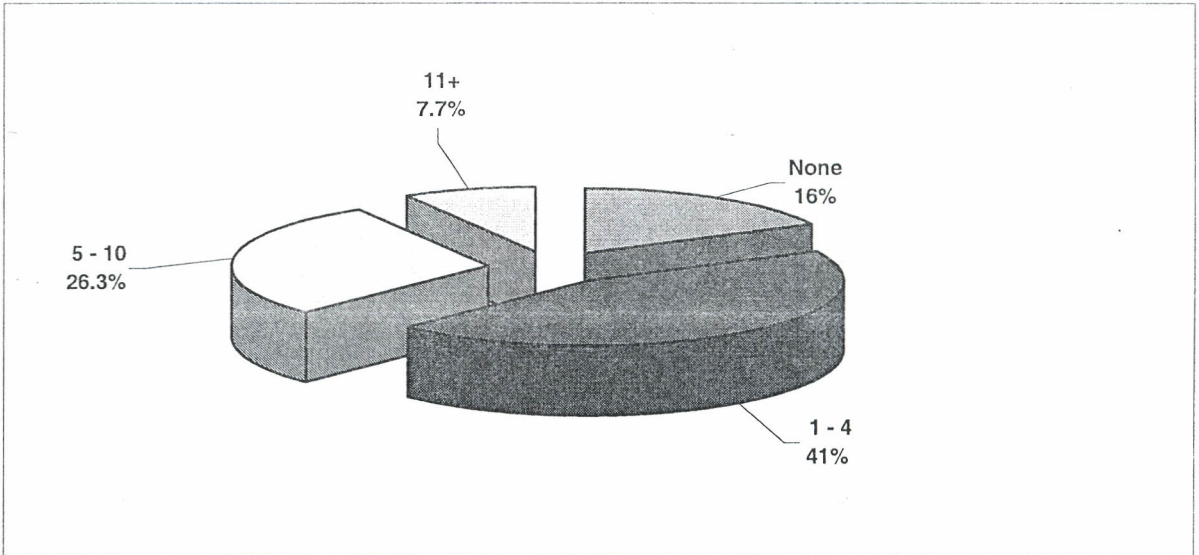
- Majority of the respondents did no extra job forming 55.1%. Those who did extra work of between 1-4 hrs with 24.4% followed them. Others worked between 5-10 hrs and 11 and above hrs forming 12.8% and 0.6% of the respondents respectively.

**Chart 11: Hours on average spend on leisure**



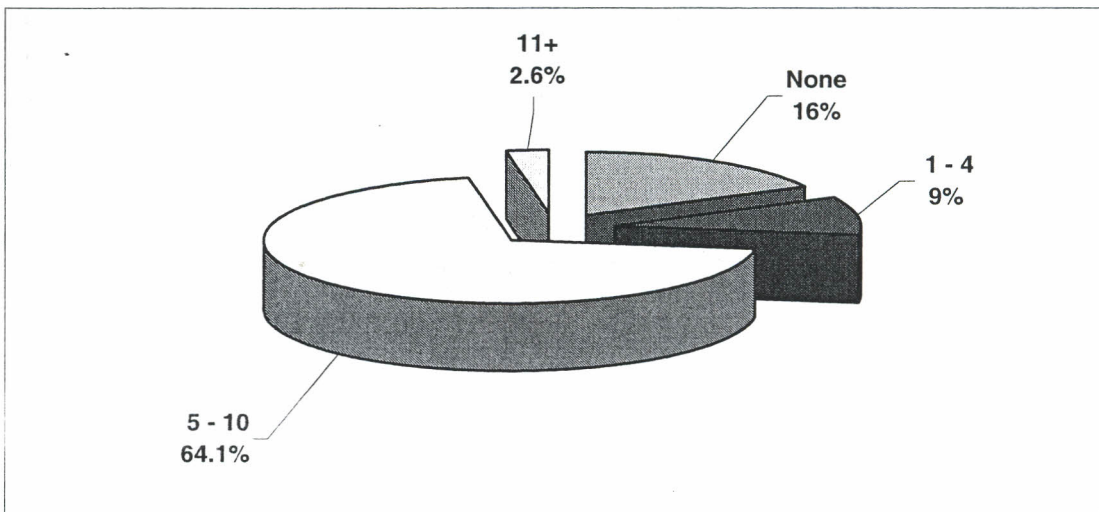
- Majority spent between 1-4 hrs on leisure forming 49.4%, those who had no leisure time who formed 39.1% followed them. Those who spent 5-10 hrs and 11 hrs and above had 3.2% and 0.6% respectively.

**Chart 12: Hours on average spend on Family**



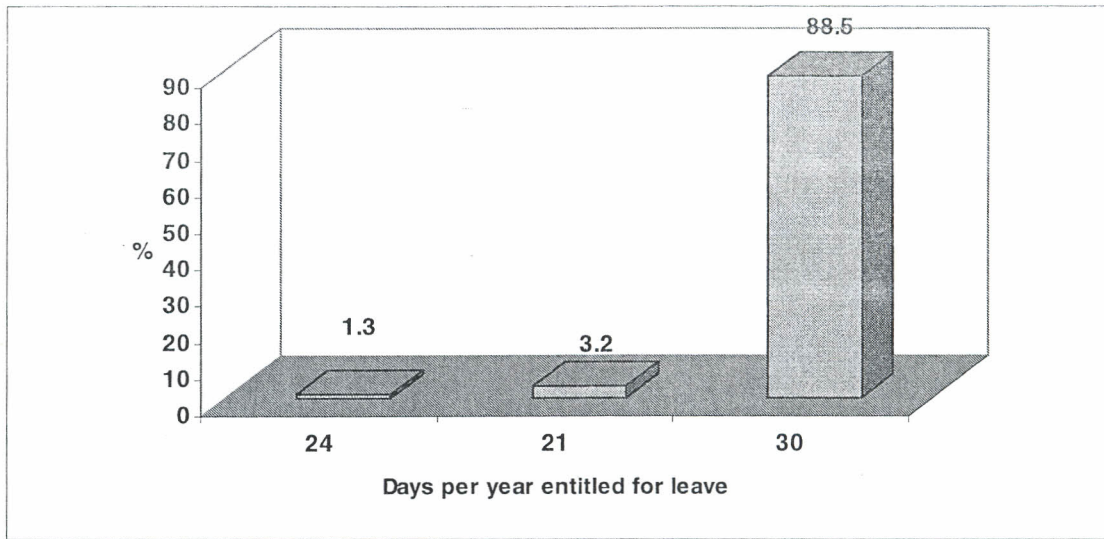
- Majority spent 1-4 hrs with their family and formed 41% of the respondents followed by those who spent 5-10 hrs with 26%. There were others who had no time with their families and had formed 16% while those who spent more than 11 hrs with their families had 7.7%.

**Chart 13: Hours spent on sleeping?**



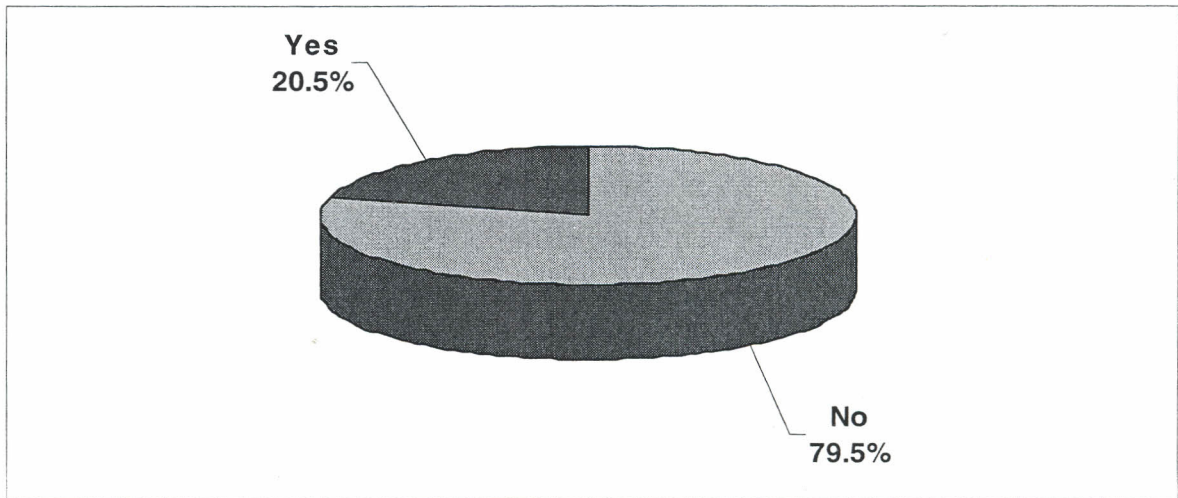
- Majority spent 5-10 hrs sleeping with a percentage of 64.1% followed by those who spent none of their time sleeping forming 16%, others spent 1-4 hrs sleeping and those with 11 and above hrs had 9.0% and 2.6% respectively.

**Chart 14: Leave Days per year**



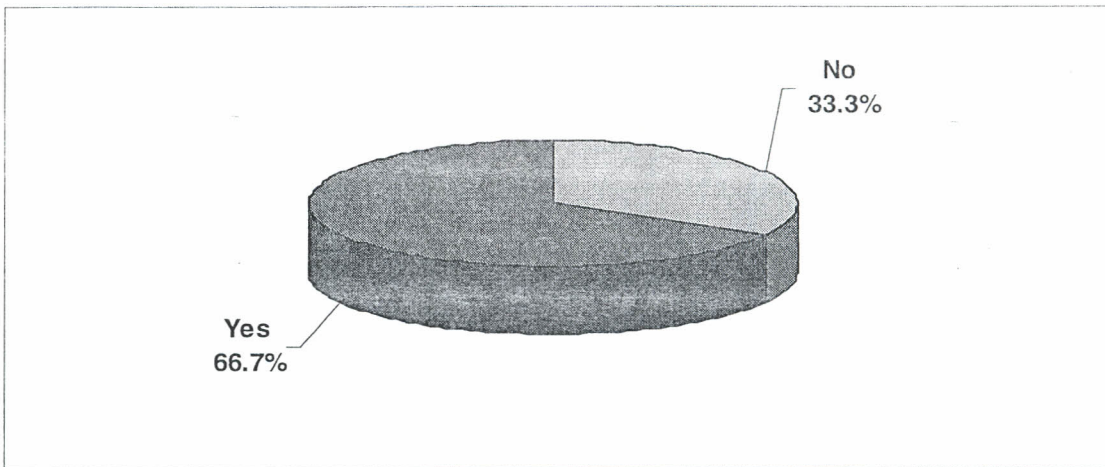
- Majority of the respondents were entitled for 30 days leave followed by those with 21 days and those with 24 days and they formed 88.5%, 3.2% and 1.3% respectively.

**Leave surrender in lieu of money**



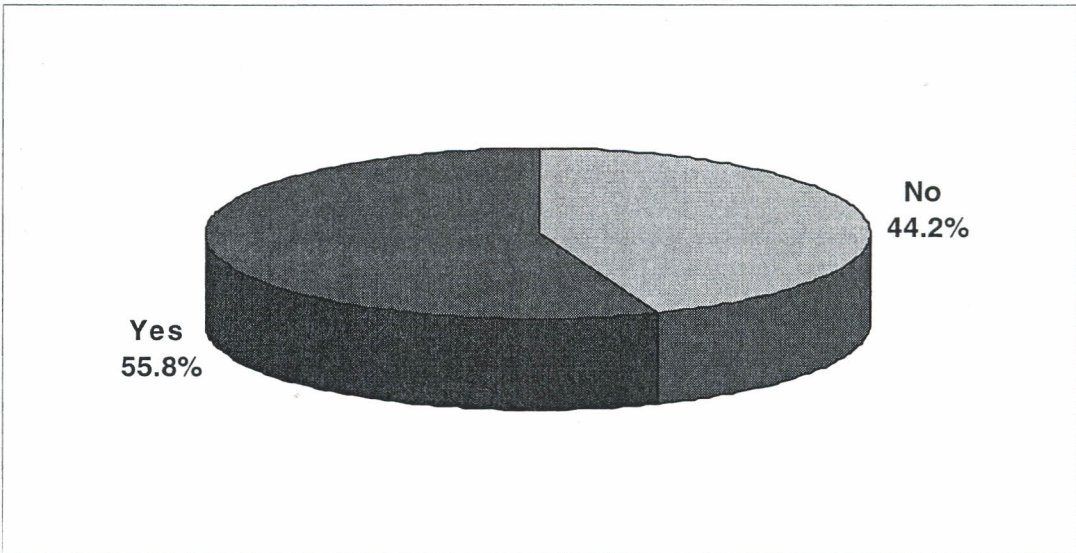
- 79.5% of the respondents did not surrender their leave for money while 20.5% surrendered their leave for money.

**Chart 15: Job satisfaction**



- 66.7% were satisfied with their job while 33.3% were not.

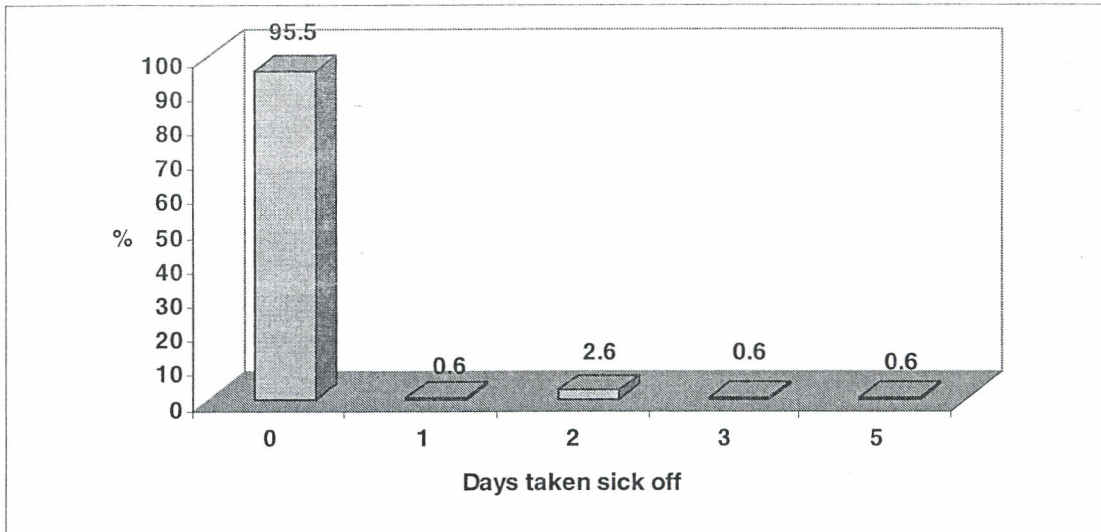
**Chart 16: Willingness to Change to other departments**



- 55.8% would change from their department while 44.2% would not change.

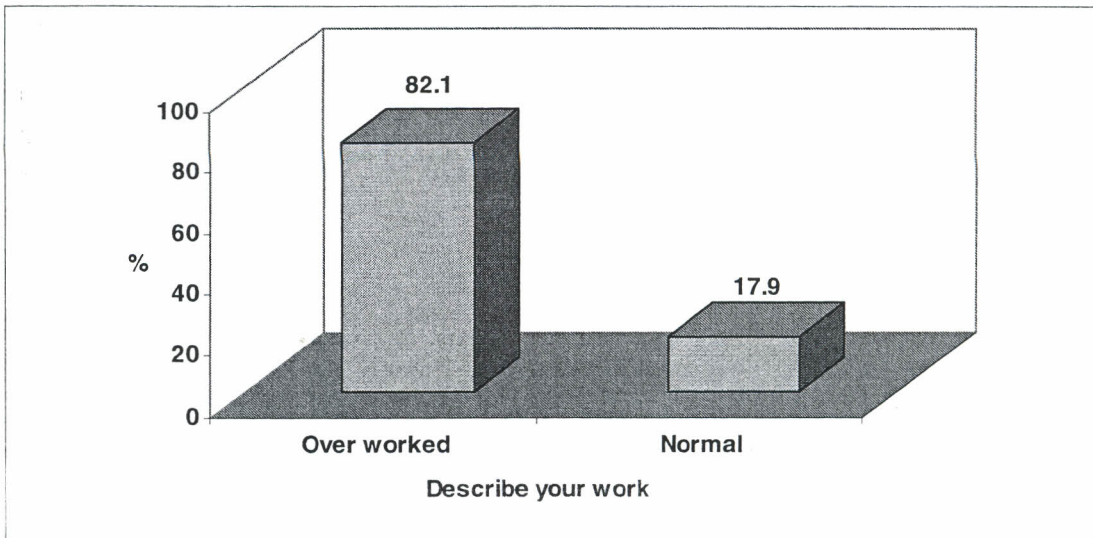


**Chart 17: Days taken sick off**



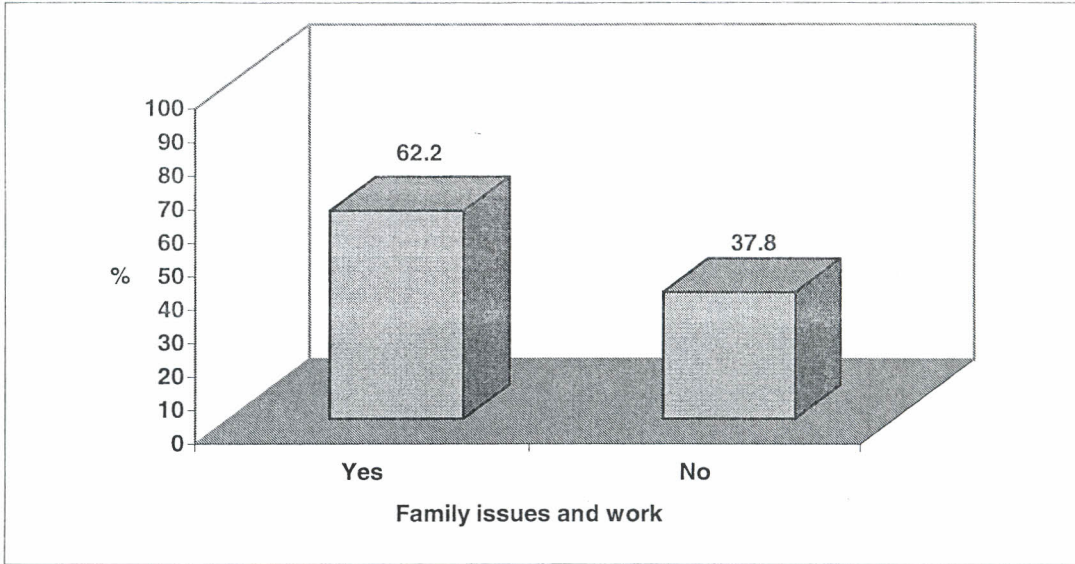
- Majority of the respondents had not taken a sick off forming 95.5%, others had taken between 3-5 days sick off forming 0.5%.

**Chart 18: Work load**



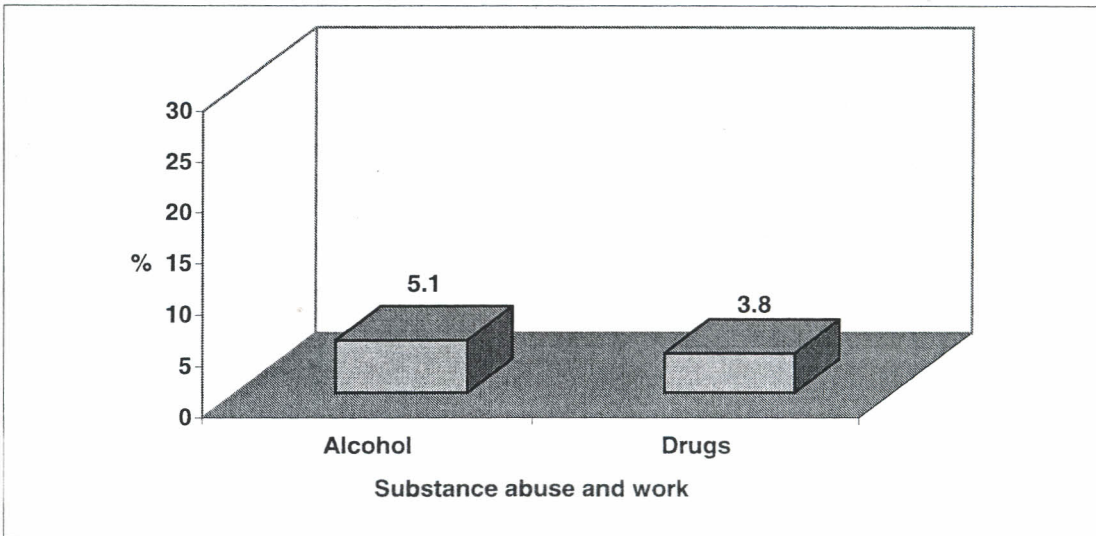
- 82.1% of the respondents felt they were overworked while 17.9% felt that they did normal duties.

**Chart 19: Family issues and work**



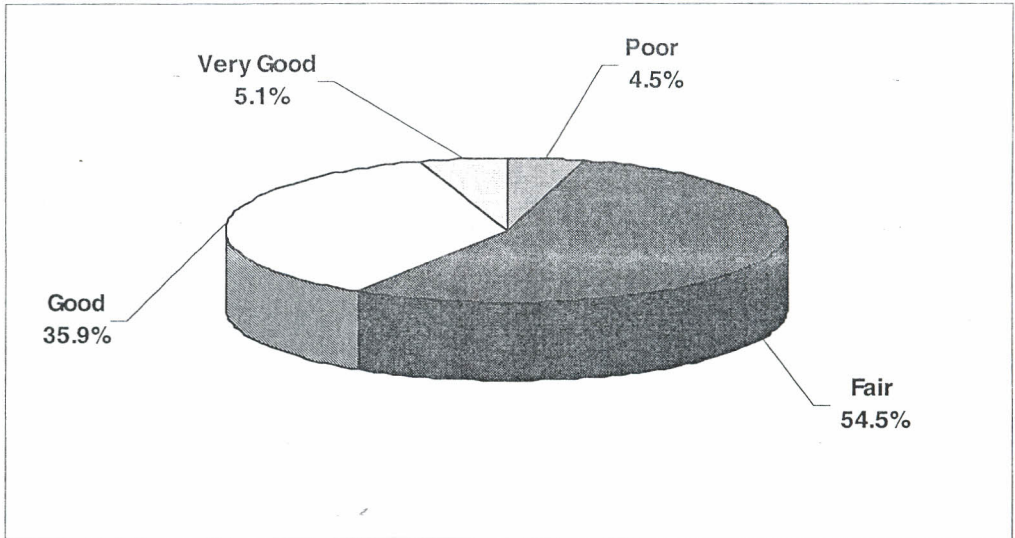
- 62.2% had nothing in their family affecting their work while 37.8% had issues that affected their work.

**Chart 20: Substance abuse**



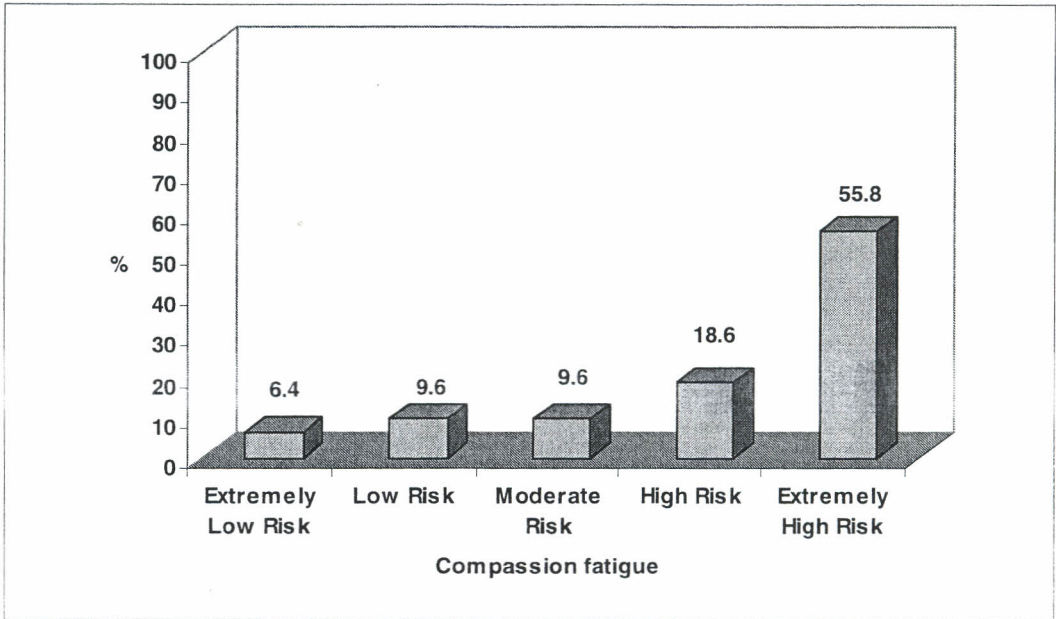
- Majority of the people 91% never responded to this question. Those who responded to this question had increased their consumption of alcohol and drug and formed 5.1% and 3.8% respectively.

**Chart 21: Working Environment**



- 54.5% felt they were working in a fair environment followed by 35.9% who responded good. Other responses were poor and very good which formed 4.5% and 5.1% respectively.

**Chart 22: Compassion Fatigue**



**Table 1: Religion versus compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Religion	catholic	4	4	3	10	17	38
		10.5%	10.5%	7.9%	26.3%	44.7%	100.0%
	protestant	6	11	12	16	64	109
		5.5%	10.1%	11.0%	14.7%	58.7%	100.0%
	muslim	0	0	0	1	5	6
		.0%	.0%	.0%	16.7%	83.3%	100.0%
	others	0	0	0	2	1	3
		.0%	.0%	.0%	66.7%	33.3%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- The protestant were more vulnerable to compassion fatigue. Among the protestant there was an increase of compassion fatigue of 14.7% (16 / 109) of those with high fatigue increasing to 58.7% (64 / 109) for those with extremely high level of compassion fatigue. There was statistical significance between religion and compassion fatigue ( $X^2 = 11.793$ ;  $df = 12$ ;  $p = .0462$ ).

**Table 2: Age group versus compassion fatigue**

		Compassion fatigue					Total
		Extremely low level	Low risk	Moderate risk	High risk	Extremely high risk	
	Male	6	5	5	9	28	53
Gender		11.2%	9.4%	9.4%	17.0%	52.8%	100%
	Female	4	10	10	20	59	103
		3.9%	9.7%	9.7%	19.4%	57.3%	100%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100%

Predisposition to compassion fatigue was high in the age group between 26 – 35 years (58.3%) increasing from high to extremely high level and those between the ages of 36-45 years (32.1%). The findings were statistically significant ( $X^2 = 27.841$ ;  $df = 16$ ;  $p = .033$ ).

**Table 3: Gender versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremel y Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Gender	male	6	5	5	9	28	53
		11.3%	9.4%	9.4%	17.0%	52.8%	100.0%
	female	4	10	10	20	59	103
		3.9%	9.7%	9.7%	19.4%	57.3%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- Vulnerability to compassion fatigue was high among the female staffs with 19.4% (20 / 103) being at high risk and 57.3% (59 / 103) of female at extremely high risk. There was no statistically significance between gender and compassion fatigue ( $X^2 = 3.261$ ;  $df = 4$ ;  $p = .515$ ).

**Table 4: Marital status versus compassion fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Marital status	Married	8	12	10	22	64	116
		6.9%	10.3%	8.6%	19.0%	55.2%	100.0%
	Single	1	0	4	5	22	32
		3.1%	.0%	12.5%	15.6%	68.8%	100.0%
	widowed	1	1	1	0	1	4
		25.0%	25.0%	25.0%	.0%	25.0%	100.0%
	separated	0	1	0	2	0	3
		.0%	33.3%	.0%	66.7%	.0%	100.0%
	cohabiting	0	1	0	0	0	1
		.0%	100.0%	.0%	.0%	.0%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- Compassion fatigue was most common among the female staff working in the critical areas. Among the staffs 19% (22 / 116) had high risk and 55.2% (64 / 116) of females had extremely high risk. There was a statistically significance relationship between compassion fatigue and marital status ( $X^2 = 27.841$ ;  $df = 16$ ;  $p = .033$ ) the other forms of status had compassion fatigue of a variety of levels

**Table 5: Number of children versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Number of children	None	3	2	3	4	22	34
		8.8%	5.9%	8.8%	11.8%	64.7%	100.0%
	1-3	7	12	9	25	56	109
		6.4%	11.0%	8.3%	22.9%	51.4%	100.0%
	4-5	0	1	2	0	6	9
		.0%	11.1%	22.2%	.0%	66.7%	100.0%
	6+	0	0	1	0	3	4
		.0%	.0%	25.0%	.0%	75.0%	100.0%
<b>Total</b>		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- Compassion fatigue was commonest amongst those with between 1 and 3 children. The level of compassion fatigue increased from (22.9%) 25 / 109 to (51.4%) 56 / 109 for those with high risk of compassion fatigue to extremely high risk of fatigue respectively. There was no statistical significance between the number of children and compassion fatigue. ( $X^2 = 10.661$ ;  $df = 12$ ;  $p = .558$ .)



**Table 6: Unit of work versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Which unit do you work in	Burns unit	2	4	3	2	15	26
		7.7%	15.4%	11.5%	7.7%	57.7%	100.0%
	Intensive care unit	4	9	9	16	55	93
		4.3%	9.7%	9.7%	17.2%	59.1%	100.0%
	Paed unit	4	2	3	11	17	37
		10.8%	5.4%	8.1%	29.7%	45.9%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- High levels of compassion fatigue were found among those working in the intensive care unit. The levels of compassion fatigue increased from 17.2% (16 / 93) for those with high levels to 59.1% (56 / 93) for those with extremely high level. There was no statistical significance between units where one worked and compassion fatigue ( $X^2 = 8.674$ ;  $df=8$ ;  $p=. 371$ ).

**Table 7: Employment status versus Compassion fatigue**

		Compassion Fatigue					Total
		Extremel yLow Risk	Low Risk	Moderate Risk	High Risk	Extremel yHigh Risk	
What is your current employment	Permanen t	10	15	13	27	77	142
		7.0%	10.6%	9.2%	19.0%	54.2%	100.0%
	Contract	0	0	1	0	2	3
		.0%	.0%	33.3%	.0%	66.7%	100.0%
	Temporary	0	0	1	2	7	10
		.0%	.0%	10.0%	20.0%	70.0%	100.0%
	Others	0	0	0	0	1	1
		.0%	.0%	.0%	.0%	100.0%	100.0%
<b>Total</b>		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- Those employed permanent had high level of compassion fatigue. The compassion fatigue level increased from 19% (27 / 142) for the high risk to 54.2 %for the extremely high level. There was no statistical significance between employment status and compassion fatigue ( $X^2 = 5.955$ ;  $df = 12$ ;  $p = .918$ ).

**Table 8: Profession of staff versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Which cadre of staff are you	Doctor	2	1	1	1	5	10
		20.0%	10.0%	10.0%	10.0%	50.0%	100.0%
	Nurse	4	12	12	24	56	108
		3.7%	11.1%	11.1%	22.2%	51.9%	100.0%
	Physiotherapy	0	0	0	1	1	2
		.0%	.0%	.0%	50.0%	50.0%	100.0%
	Occupational therapy	0	0	0	0	2	2
		.0%	.0%	.0%	.0%	100.0%	100.0%
	Medical Engineering	0	0	0	1	5	6
		.0%	.0%	.0%	16.7%	83.3%	100.0%
	Laboratory	3	1	2	1	3	10
		30.0%	10.0%	20.0%	10.0%	30.0%	100.0%
	Support staff	1	1	0	0	12	14
		7.1%	7.1%	.0%	.0%	85.7%	100.0%
	Others	0	0	0	1	3	4
		.0%	.0%	.0%	25.0%	75.0%	100.0%
<b>Total</b>		<b>10</b>	<b>15</b>	<b>15</b>	<b>29</b>	<b>87</b>	<b>156</b>
		<b>6.4%</b>	<b>9.6%</b>	<b>9.6%</b>	<b>18.6%</b>	<b>55.8%</b>	<b>100.0%</b>

- Being a nurse was associated with extremely highest level of compassion fatigue. The level of compassion fatigue in nurses increased from 22.2% (24 / 108) for the high risk to extremely high risk of 51.1% (56 / 108). There was no statistical significance between the profession and compassion fatigue ( $X^2 = 30.753$ ;  $df = 28$ ;  $P = .328$ ).

**Table 9: Highest level of education versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Highest level of education	Form 1-4	0	1	1	0	8	10
		.0%	10.0%	10.0%	.0%	80.0%	100.0%
	College	8	13	11	25	72	129
		6.2%	10.1%	8.5%	19.4%	55.8%	100.0%
	University	2	1	3	4	7	17
		11.8%	5.9%	17.6%	23.5%	41.2%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- The results showed that college trained staff had the highest number of those with compassion fatigue. Their level of compassion fatigue increased from 19.4% (25 / 129) for high risk to 55.8% (72 / 129) of the extremely high risk. There was no statistical significance between the levels of education and compassion fatigue ( $X^2 = 6.815$ ;  $df = 8$ ;  $p = .557$ ) other education status still showed some form of compassion fatigue.

Table 10: Working period versus Compassion Fatigue

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
How long have you worked in this	< 12 Months	4	2	3	5	25	39
		10.3%	5.1%	7.7%	12.8%	64.1%	100.0%
	1-5 yrs	3	8	5	16	26	58
		5.2%	13.8%	8.6%	27.6%	44.8%	100.0%
	6-10 yrs	3	4	4	8	23	42
		7.1%	9.5%	9.5%	19.0%	54.8%	100.0%
	11-15 yrs	0	0	1	0	5	6
		.0%	.0%	16.7%	.0%	83.3%	100.0%
	16-20 yrs	0	0	1	0	3	4
		.0%	.0%	25.0%	.0%	75.0%	100.0%
	21-25 yrs	0	0	0	0	2	2
		.0%	.0%	.0%	.0%	100.0%	100.0%
Total		10	14	14	29	84	151
		6.6%	9.3%	9.3%	19.2%	55.6%	100.0%

- Vulnerability to compassion fatigue depended on the stay in the unit, those who had worked 12 months had the highest increase of fatigue 64.1% the other group that showed an increase were those who had worked for 1 to 5 years they had and increase of compassion fatigue increasing from 27.6% (16 / 58) for the high risk to 44.8% (26 / 58). There was no statistical significance difference between working period and compassion fatigue. ( $X^2 = 15.416$ ;  $df = 20$ ;  $p = .752$ ).

**Table 11: Extra work to earn a living versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Outside the working hours on average how long do you spend on extra work to earn a living	None	5	8	5	18	50	86
		5.8%	9.3%	5.8%	20.9%	58.1%	100.0%
	1-4	3	3	6	3	23	38
		7.9%	7.9%	15.8%	7.9%	60.5%	100.0%
	5-10	1	1	4	6	8	20
		5.0%	5.0%	20.0%	30.0%	40.0%	100.0%
	11+	0	0	0	1	0	1
		.0%	.0%	.0%	100.0%	.0%	100.0%
<b>Total</b>		9	12	15	28	81	145
		6.2%	8.3%	10.3%	19.3%	55.9%	100.0%

- Extremely high level of compassion fatigue was amongst those who did no extra work. Their compassion fatigue increased from 20.9% (18 / 86) for the high risk to 58.1% (50 / 86) for the extremely high risk. There was no statistical significance between hours spent on extra work and compassion fatigue. ( $X^2 = 14.388$ ;  $df = 12$ ;  $p = .277$ ). The others who spent some times earning a living also showed some compassion fatigue.

**Table 12: Leisure time versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Outside the working hours on average how long do you spend on leisure	None	5	8	5	8	35	61
		8.2%	13.1%	8.2%	13.1%	57.4%	100.0%
	1-4	4	5	10	16	42	77
		5.2%	6.5%	13.0%	20.8%	54.5%	100.0%
	5-10	0	0	0	2	3	5
		.0%	.0%	.0%	40.0%	60.0%	100.0%
	11+	0	0	0	0	1	1
		.0%	.0%	.0%	.0%	100.0%	100.0%
<b>Total</b>		9	13	15	26	81	144
		6.3%	9.0%	10.4%	18.1%	56.3%	100.0%

- Vulnerability to compassion fatigue was highest among those who spent 1 to 4 hrs on leisure time. Their level of compassion fatigue increased from 20.8% (16 / 77) for high fatigue and 54.5% (42 / 77) of the extremely high level of compassion fatigue. There was no statistical significance between time spent on leisure and compassion fatigue ( $X^2 = 7.564$ ;  $df = 12$ ;  $p = .818$ ). Other staff showed some level of compassion fatigue.

**Table 13: Time spent with family and Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Outside the working hours on average how long do you spend with your	None	2	1	1	3	18	25
		8.0%	4.0%	4.0%	12.0%	72.0%	100.0%
	1-4	4	6	8	13	33	64
		6.3%	9.4%	12.5%	20.3%	51.6%	100.0%
	5-10	2	4	5	8	22	41
		4.9%	9.8%	12.2%	19.5%	53.7%	100.0%
	11+	1	1	1	2	7	12
		8.3%	8.3%	8.3%	16.7%	58.3%	100.0%
<b>Total</b>		9	12	15	26	80	142
		6.3%	8.5%	10.6%	18.3%	56.3%	100.0%

- Compassion fatigue was higher in-group of staff who spent 1 to 4 hrs with their family. The level of compassion fatigue increases from 20.3% (13 / 64) for high fatigue to 51.6% (33 / 64) for those with extremely high level of compassion fatigue there was no statistical reference between compassion fatigue and number of hours spend in the family. There was no statistical significance between hrs spent with family and compassion fatigue. ( $X^2 = 4.605$ ;  $df=12$ ;  $p=.970$ ). Other staff who spent a variety of time with their family showed compassion fatigue.



**Table 14: Hours spent on sleeping versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Outside the working hours on average how long do you spend sleeping	Nbre	0	5	1	3	16	25
		.0%	20%	4%	12%	64%	100%
	1-4	1	1	1	4	7	14
		7.1%	7.1%	7.1%	28.6%	50%	100%
	5-10	8	6	13	19	54	100
		80%	60%	130%	190%	540%	1000%
	11+	0	0	0	1	3	4
		.0%	.0%	.0%	25%	75%	100%
<b>Total</b>		9	12	15	27	80	143
		63%	84%	105%	189%	559%	1000%

- Sleeping time was not statistically significant with compassion fatigue ( $X^2 = 11.644$ ;  $df=12$ ;  $p=.475$ ). Those who spent between 5-10 hours a day on sleeping had high-level compassion fatigue from 19% (19 / 100) to 54% (54 / 100) for those who had extremely high level of compassion fatigue.

**Table 15: Number of leave days versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
How many days per year are you entitled for leave	24	0	0	0	0	2	2
		.0%	.0%	.0%	.0%	100.0%	100.0%
	21	0	1	0	0	4	5
		.0%	20.0%	.0%	.0%	80.0%	100.0%
	30	10	14	14	27	73	138
		7.2%	10.1%	10.1%	19.6%	52.9%	100.0%
Total		10	15	14	27	79	145
		6.9%	10.3%	9.7%	18.6%	54.5%	100.0%

- Majority of those who worked in the hospital critical areas were entitled to 30 days leave. The level of compassion fatigue was highest in this group with an increase from 19.6% (27 / 138) for the high to 52.9% for the extremely high compassion fatigue. There was no statistical significance between compassion fatigue and leave days ( $X^2 = 4.67$ ;  $df=8$ ;  $p= .792$ )

**Table 16: Leave surrender versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Do you surrender your leave in lieu for money	No	8	13	12	18	73	124
		6.5%	10.5%	9.7%	14.5%	58.9%	100.0%
	Yes	2	2	3	11	14	32
		6.3%	6.3%	9.4%	34.4%	43.8%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- Those staff who never surrendered their leave had compassion fatigue increasing from 14.5% (18 / 124) high risk to 58.9% (73 / 124) for the extremely high risk. There was no statistical significance between those who do not surrender and those who do surrender and compassion fatigue.

( $X^2 = 6.917$ ;  $df = 4$ ;  $p = .146$ )

**Table 17: Job satisfaction and Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Are you satisfied with your current job	No	2	5	4	13	28	52
		3.8%	9.6%	7.7%	25.0%	53.8%	100.0%
	Yes	8	10	11	16	59	104
		7.7%	9.6%	10.6%	15.4%	56.7%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- Those satisfied by their jobs showed levels compassion fatigue increasing from 15.4% (16 / 104) to 56.7% (59 / 104) for high risk and extremely high risk of compassion fatigue. There was no statistical significance between compassion fatigue and job satisfaction ( $X^2 = 2.876$ ;  $df=4$ ;  $p=. 579$ ).

Table 18: Willing to change to another department versus Compassion Fatigue

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
If given an opportunity outside your department would you like to change	No	9	8	8	14	30	69
		13.0%	11.6%	11.6%	20.3%	43.5%	100.0%
	Yes	1	7	7	15	57	87
		1.1%	8.0%	8.0%	17.2%	66.5%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- Extremely high risk of compassion fatigue was found among the individuals who were willing to change their department. Their levels of compassion fatigue increased from 17.2% (15 / 87) and 66.5%(57/87) for those with high level of compassion fatigue and extremely high levels of compassion fatigue. There was a statistical significance between compassion fatigue and willingness to change department. ( $X^2=13.044$ ;  $df=4$ ;  $p=.011$ ).

Table 19: Sick off versus Compassion fatigue

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
In the last month how many days have you taken sick off	0	10	15	14	27	83	149
		67%	101%	94%	181%	55.7%	1000%
	1	0	0	0	0	1	1
		.0%	.0%	.0%	.0%	1000%	1000%
	2	0	0	0	2	2	4
		.0%	.0%	.0%	500%	500%	1000%
	3	0	0	1	0	0	1
		.0%	.0%	1000%	.0%	.0%	1000%
	5	0	0	0	0	1	1
		.0%	.0%	.0%	.0%	1000%	1000%
Total		10	15	15	29	87	156
		64%	96%	96%	186%	55.8%	1000%

- High level of compassion fatigue were found among individuals who had not taken sick off. Their level of compassion fatigue increased from 18.1% (27 / 149) to 55.7% (83 / 149). There no was statistical significant between sick off and compassion fatigue ( $X^2 = 14.237$ ;  $df=16$ ;  $p=. 581$ ). The other staff that took sick off also showed compassion fatigue.

**Table 20: Workload versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extrem ely Low Risk	Low Risk	Moderat e Risk	High Risk	Extrem ely High Risk	
Describe your work,	over worked	6	11	13	24	74	128
		4.7%	8.6%	10.2%	18.8%	57.8%	100.0 %
	do normal jobs	4	4	2	5	13	28
		14.3%	14.3 %	7.1%	17.9%	46.4%	100.0 %
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0 %

- Those who were overworked had levels of compassion fatigue increasing from 18.8% (24 / 128) to 57.8% (74 / 128). There was no statistical significance between those who felt overworked and compassion fatigue ( $X^2=4.83$ ;  $df=4$ ;  $p=.304$ ).

**Table 21: Family issue versus compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
Are there things in your family that negatively affect your work performance	No	9	8	10	20	50	97
		9.3%	8.2%	10.3%	20.6%	51.5%	100.0%
	Yes	1	7	5	9	37	59
		1.7%	11.9%	8.5%	15.3%	62.7%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- Compassion fatigue levels increased from 20.6% (20 / 97) for those without family issues to 51.7% (50 / 97) levels of high risk to extremely high risk respectively. There was no statistical significance between compassion fatigue and family issues. ( $X^2=5.307$ ;  $df=4$ ;  $p=. 257$ ).



Table 22: Substance abuse versus Compassion Fatigue

		Compassion Fatigue			Total
		Low Risk	Moderate Risk	Extremely High Risk	
Have you in the last month increased the intake of	alcohol	1	1	6	8
		12.5%	12.5%	75.0%	100.0%
	drugs	0	0	6	6
		.0%	.0%	100.0%	100.0%
Total		1	1	12	14
		7.1%	7.1%	85.7%	100.0%

- Those who abused alcohol had 75% (6 / 8) suffered from extremely high level of compassion fatigue while those who misused drugs had level of compassion fatigue of 100% (6 / 6). There was no statistical significance between substance abuse and compassion fatigue ( $X^2=1.750$ ;  $df=2$ ;  $p=.417$ ).

**Table 23: Work environment versus Compassion Fatigue**

		Compassion Fatigue					Total
		Extremely Low Risk	Low Risk	Moderate Risk	High Risk	Extremely High Risk	
How do you like the environment where you are	Poor	0	0	0	1	6	7
		.0%	.0%	.0%	14.3%	85.7%	100.0%
	Fair	5	6	7	18	49	85
		5.9%	7.1%	8.2%	21.2%	57.6%	100.0%
	Good	5	9	8	9	25	56
		8.9%	16.1%	14.3%	16.1%	44.6%	100.0%
	Very Good	0	0	0	1	7	8
		.0%	.0%	.0%	12.5%	87.5%	100.0%
Total		10	15	15	29	87	156
		6.4%	9.6%	9.6%	18.6%	55.8%	100.0%

- The staffs who rated the environment as fair had levels of compassion fatigue increasing 21.2% (18 / 85) for high level of fatigue to 57.6% (49 / 85) for the extremely high level of fatigue. There was no statistical significance between work environment and compassion fatigue ( $X^2=13.474$ ;  $df= 12$ ;  $p=. 336$ ).

### **Testing the hypothesis**

- The rejection of null hypothesis ( $\chi^2=313.134$ ;  $df = 292$ ;  $p = 189$ ).

### **Constraints**

- Some of the staff were working on night shift and made data collection process difficult.
- Some other participants expected some handouts for participating in the study.

## CHAPTER SIX 6.0

### 6.1 DISCUSSION

### 6.2 SOCIAL DEMOGRAPHIC DATA

Age of those employed in the critical care areas where between the ages of 25 to 55, with those between the ages of 26 – 35 forming the majority staff. The exodus of staff leaving the institution as they gain experience in these critical care areas can explain this. The nurses have been seeking greener pasture to the western countries like Britain and America where their services are highly required and also the pay being better than what they get in Kenya. Most of the Doctors in Kenya have migrated to other African countries like South Africa, Zimbabwe and Angola.

The hospital is involved in Training of the specialized course is forced to employ other staff. There is need for the hospital management to think of ways of retaining its staff as the experienced staff are leaving the hospital to the young and inexperienced staff. Some of the ways suggested in this study is improving the staff enumeration.

### MARITAL STATUS

The marital status of the respondent tended to follow the National Distribution of people in such population in general.

However there was a considerable population of single status. This was due to the fact that many of the staff were young and hence still considering marriage.

## **RELIGION**

Majority of the staff working in the critical care area were religious. Religion tends to support individuals in situations, which are difficult to accept like the death of a patient. It also gives hope by explaining that there is another world where the individual will leave again. All religious organization tends to give hope where there is no hope.

## **EDUCATION**

Most of the staffs working in the critical care area were holder of college Diplomas from middle level colleges like the Medical Training Colleges. The nurses were also trained in other specialization related to the work they were performing. Those in the intensive care unit were trained in intensive care, While those in renal unit, had renal training course. Those in Burn unit had a Burn unit course. These courses are offered by Kenyatta National Hospital Training Department.

The Doctors working in this unit were also specialized; those in the intensive care unit were trained in Anesthesia, while those in Burns unit were surgeon; who had specialized in plastic surgery. Those in the renal unit were specialized in renal surgery.

## **NUMBER OF CHILDREN**

Many of the workers in this unit had between 1-3 children. This would be explained by the fact that they were enlightened group and hence using a variety of family planning method, being offered freely by the institution. There was also a considerable number of staff that were not married because they were young and awaiting a chance of marriage. The hospital needs to continue supporting its staffs, to continue utilizing the free medical services provided by the institution.

## **6.3 WORKING SITUATION**

### **Working unit.**

Many of the critical care workers worked in the intensive care unit. This can be explained by the fact that the unit is a combination of two unit, what was formally the high dependence unit which was combined with intensive care unit to make the present

intensive care unit. The workers in this unit were not transferred and continued to work in the unit. This agreement was done in 2007 by the Hospital management.

The staffs in the critical care areas of the Hospital work in shift. The first shift report on duty at 7.00 AM in the morning and is relieved by another shift at 1.00 P.M. This shift is relieved by the night duty shift at 6.00 P.M. This type of arrangement is continuous throughout the month and year. The shift duties require many staff in order to balance between the various shifts.

## **EMPLOYMENT STATUS**

Majority of the department staffs are employed permanently. The policy of the hospital is that after working for a period of six months the staffs on contracts automatically start working as permanent staff. The Government also operates within the same policy and is the main supporter of staff. Permanent staffs are pensionable.

## **PROFESSION OF STAFF**

The nurses formed the majority because they perform most of the work in the department.

Most patient in the critical care areas are immobilized when on treatment. The critical care areas have their patient on life support machines, like the cardiac monitor and respirators. The patient on Burn units are heavily bandaged due to the extent of their burns, while other are nursed with bed candles to prevent the linen pressure from interfering with the burns. The renal unit patient are put on bed rest once the process of Haemo-dialysis start. The patient in the critical care areas hence requires a lot of monitoring and this is called total nursing care. The total nursing care entails nursing procedures like, bed making, bed bathing, feeding, proving elimination implement like bedpan and urinals, maintenance of fluid input and output, turning of patient to prevent bed sores and giving the drugs which have been prescribed.

This study agrees with another study carried out at Kenyatta National Hospital by Kokonya 2004, which found that nurses formed the majority of the health worker in the study.

### **Duration of work**

The workers in the critical areas had worked for a short duration of time. Those who had worked for between 1-5 years formed the majority. This can be explained from the fact that there has been an exodus of staffs resigning and leaving the hospital for better employment elsewhere.

This can cause a problem as the experienced staff leave the hospital to others who have little experience. If this trend is left unattended it can affect the quality of Health care given to the patient. The Hospital should come up with modalities of retaining the experienced staff.

### **Extra work outside Hospital to earn a living**

Some staff worked elsewhere to earn a living. This could have been prompted by the remuneration offered by Hospital, which might not be enough to make individual staff comfortable.

The other staff who worked elsewhere might have had other areas of supplementing their earning, like having other business which do not require a lot of monitoring like the Matatu business. The institution needs to look at the remuneration offered to the staff.

### **Hours on average spent leisure**

Many of the staff managed to set some time for leisure, with majority of staff having some form of leisure. This can be explained from the point that work is carried out in shifts. This shift leaves individual staff with some time for leisure. The hospital staffs need some education on how to spend their leisure time. This is so as some staff can misuse this time and predispose themselves to HIV/AIDS.

### **Hours spent with family**

Staff working in the critical care areas also managed to spend some time with their family. This can be explained from the perspective of the work shift, which are flexible. This is a positive point as the family is one of the basic units of socialization.

### **Leave days per years.**

Majority of the staffs were on permanent status and hence entitle for 30 days leave. This is in line with Government policy of employment of staff.

### **Leave surrender.**

Some staff opts to continue working and is paid money instead of taking their leave. The perspective of economy whereby there is a need for money can explain this. The other staff that is the majority may have adopted to live within their means.

### **Jobs satisfaction**

The Hospital put a lot of emphasis on the critical care areas. This results to a lot of resources being committed to these areas. This is prompted by the fact you cannot go to borrow something when the patient is collapsing, and hence the things needed must be within reach and available at all times.

This removes pressure on the staff, as most of materials required for work are available. This explains the high satisfaction rate among staffs working in these units.

### **Willingness to change department**

The workload in the critical care areas is usually very heavy. The allocation in some areas at times is two patients per single staff and this make the staff feel overworked. There is also stress associated with the high mortality and morbidity in this unit.

A mechanism of taking care of the staff in the event of a critical incidence should be put in place. This would ensure that staffs do not suffer from compassion fatigue. The above issue made the staffs within the critical care areas wants to change to another department, which, they may have been perceived as less busy.

### **Day taken sick off**

Many of the staff working in these critical care areas were young. The young people are associated with fewer ailments. The work in shift assures that many of the workers had ample rest.



This hospital should continue providing the much needed resources and climate for the critical care area staff.

### **Workload**

Patient in the critical care area are very heavily demanding in terms of nursing care. The stress associated with nursing and taking care of critically sick patients make most of the staff in the department tired and overworked.

The hospital should set up a mechanism of making sure that staff does not suffer from accumulated stress.

### **Family issues**

Majority of the staffs had few children 1-3, they were also young, while some were unmarried. This make the staffs have little family issues interfering with them.

### **Substance abuse.**

The stress associated with working with the critically sick patient make some staff to misuse drugs and alcohol.

A mechanism should be put in place to take care of the psychological aspect of the staff.

### **Working environment**

The set up of the critical areas is situated in a special area away from other unit. This is to ensure that the procedures are not interfered by movement, which is common among other units.

The area is also well secured with some areas requiring changing of shoes before entering the unit. This make the staff feel that their environment were very good, good and fair only a small proportion of the staff felt that the environment was poor.

### **Compassion fatigue**

The prevalence of compassion fatigue in the critical areas was found to be 74.4%. A variety of variables were found to be responsible for the development of compassion fatigue. The finding of this study are consistent with the finding of another study carried

out in Kenyatta National Hospital among nurses and doctors which found a compassion fatigue rate of 33.1 and 12.9% respectively (22).

### **Sex versus compassion fatigue**

Many of the staffs working in the critical care areas were female. The females have other roles outside their working duties. In the African setting female are perceived as the homemakers. The combination of work put the females at a higher risk of compassion fatigue. Among the females the rate of compassion fatigue increased from 19.4% for those with high levels of compassion fatigue to 57.3% for those with extremely high levels. This studies agrees with another study done in south Africa by leve (1995) among 132 marriage therapist which found that family therapist experienced compassion fatigue. In other studies of the sex of staffs of the helping profession, the females have always been the majority.

### **Marital status versus compassion**

All the staffs working in the fatigue critical care areas were found to suffer from different levels of compassion fatigue. The continuous visualization of client traumatic images creates a debilitating condition to the caregiver.

The married individual staffs were more predisposed to compassion fatigued and there was a statistically significance between fatigue and marital status ( $p = .033$ ). This study disagrees with another study carried out at Kenyatta National Hospital by Kokonya 2004, which found the unmarried individuals suffering more from compassion fatigue. The critical care areas taking care of patients in the special units can explain the difference, (2).

### **No of children and compassion fatigue**

Most of the workers in the critical care areas were young. The majority had between 1-3 children and ended up suffering from compassion fatigue. Being young meant that they had little experience in handling the work a head and had few ways of adapting themselves to compassion fatigue. Their rate of compassion fatigue increased from 22.9% for those with high levels to 51.4% for those who had extremely high levels.

The workloads in most departments in the critical care areas were found to be high. These areas take care of patients who have been referred by other hospitals, K.N'H wards and those who have been done major surgery like the one heart surgery and renal transplant. Compassion fatigue was common in all the departments of the critical care areas. Those working in the intensive care unit had the highest of the number with compassion fatigue. The level of compassion in this department increased from 17.2% for those with High fatigue to 59.1% for those with extremely high risk of compassion fatigue. This study agrees with another study done by Maslach (1982) in the U.S.A, (25) that found an increase in compassion fatigue and stress among those working with families in crisis, and receiving little positive feedback, and demanding workload.

### **Employment status and compassion fatigue**

Dillion et al study on compassion fatigue found that employment status would adversely affect the way the staff works. In this study of compassion fatigue the employment status of most of the staffs were permanent. This did not appear to protect the staffs from compassion fatigue. Those working permanently had compassion fatigue increasing from 19.0% to 54.2% for compassion fatigue. This study agrees with another study carried out, in Australasia by Coinad et al (2003) to assess levels of compassion fatigue among emergency workers, which showed that 71.8% had high levels of emotional exhaustion and 69.9% had high levels of depersonalization, which are all symptoms of compassion fatigue.(17)

### **Profession of staffs and compassion fatigue**

Being a nurse in the critical care area was associated with the highest level of compassion fatigue. This could be attributed to the fact the nurses are the backbone of every unit where they form the majority of staff. In the hospital the level of compassion fatigue among the nurses increased from 22.2% for the high fatigue to 51.9% of the extremely high level of fatigue. Many of the nurses worked in shifts and as the nurses took over from one shift to another, they were taking over the lives of the particular patient most of who are very sick and in need of total nursing care. To be a caregiver means that the individual nurse chooses to walk in pain and this predisposed the nurses to high levels of

compassion fatigue. There was a statistically significance between profession of staff and compassion fatigue ( $P = .05$ ).

This study agrees with another study carried out in South Africa by Pelkopwhz 1997 that found an increasing level of compassion fatigue among nurses working with prisoners.

### **Levels of education verses compassion fatigue**

Compassion fatigue is inevitable in the work place. In every organization a considerable stress related to the work being done is allowed. The problem occurs when the stress goes above a certain level.

Charles R. Figley (2002) in his study of compassion fatigue found that people who experiences compassion fatigue are often the brightest. His findings agrees with the Finding of this study which has found increasing levels of compassion fatigue among the Doctors, Nurses and other staffs of 74.4% combine. The study also agree with the finding of another study which was carried out in Canada which found increasing levels of compassion fatigue among profession like, psychotherapist, shelter staff, attorneys, journalist, trauma researchers and emergency responders.(8)

The study also agrees with another study by Kokonya 2004 on compassion fatigue, which showed an increase of compassion fatigue among Doctors and Nurses of 1 9% and 33.1% respectively.(2)

### **Work duration versus compassion fatigue**

Majority of the staffs had worked between one to five years (1 – 5yrs). This can be attributed to the exodus of medical profession of moving to other countries seeking greener pastures. This left the critical care with staffs who are new to their department and work. Those who had worked for less than 5 years had the highest level of compassion fatigue. The duration of work was a protective factor because as the duration increased individual suffered less from compassion fatigue. The nature of work and the little experience, with staff predisposes them to development of compassion fatigue. This agrees with a study carried in USA by Harry (2000) among 328 physicians to assess psychiatric morbidity in the medical profession. The study found a global psychiatry

morbidity of 22.6% and emotional exhaustion and depersonalization of 27.5% and 25.6% respectively (13).

#### **Extra work for earning a living**

Extra work done elsewhere to earn a living did not appear to protect individuals from compassion fatigue. Those who had extra work and those who didn't showed levels of compassion fatigue. Those who did not do extra work had slightly increased levels of compassion fatigue. The levels of compassion increased from 20.9% for high levels to 58.1% for the extremely high levels. This could be attributed to other factors outside the working situation, which could be responsible for development of compassion fatigue.

#### **Leisure time versus compassion fatigue**

Due to the flexibility of shift work. Many of the staffs managed to get sometime for leisure. However leisure time did not appear in this study to protect individual from compassion fatigue, as compassion fatigue was commonest among those who had leisure time of between 1-4 hours.

There was no statistically significance difference between leisure and compassion fatigue ( $P = .818$ ).

#### **Time spent with family and compassion fatigue**

Majority of the workers spent sometimes with the family. This can be explained by the availability of time due to working in shifts. There was no statistically significance between time spent with family and compassion fatigue ( $P = .990$ )

#### **Hours spent on sleeping versus compassion fatigue**

The sleeping time had no significance with compassion fatigue. The study found that compassion fatigue also occurred to those who had ample sleeping time, however there was no statistically significance difference between time spent on sleeping and compassion fatigue ( $P = .475$ )

#### **Leave day versus compassion fatigue**

Majority of the staff were entitled for 30 days leave and working in a permanent status in the critical care areas. However being permanent did not protect individuals from compassion fatigue. This agrees with a study by Dea (1998) in Canada among hospice nurses who ranked management of intractable symptom and communication as the highest causes of compassion fatigue.(18)

### **Leave surrender versus compassion fatigue**

The stress of the working situation may make individuals result to some illment, which are presented by stressed individuals. The stressed staff looks for ways of alleviating stress, one way being taking off sick off from duty.

This agrees with another study by Adkinson (2003) in Canada which found out that public health nurses working in disaster relieve team resulted to absenteeism and may be a precursor of burnout. There were also some factors responsible for compassion fatigue other than what was considered by the researcher.

### **Willingness to change department and compassion**

Majority of the staffs had worked between 1-5 years and were tired of being in the critical care areas. The levels of compassion fatigue for those willing to change department increased from 17.2% to 65.5%, both for high level and extremely high level of compassion fatigue. This can be explained by the fact that the staffs had accumulated a lot of stress due to their nature of work. This agrees with another study carried out in Israel (2006) to assess the levels of compassion fatigue among social workers. The study found that the staffs needed some debriefing after attend the victims (10, 11, 25)

### **Sick off versus compassion fatigue**

Many of the staff working in these areas were young and majority never took off any sick off. Those who did not take sick off had their levels of compassion fatigue increasing from 18.1% to 55.1% both for high and extremely high risk.

### **Workload versus compassion fatigue**

Majority of the workers were overworked. This was due to the intensity of and nature of their work. Occasionally many of the workers were overwhelmed by the morbidity and mortality encountered in this areas. The rate of compassion fatigue increased from 18.8% for those with high fatigue to 57.8% for those with extremely high fatigue. This study agrees with he study carried out, in the Kenyatta National Hospital among nurses and doctors who reported being overworked, kokonya (2004). (2)

### **Family issues versus compassion fatigue**

At times staff carry with them stress from their families and this may affect their work. . Majority of the staffs had no stress with their family. This did not protect them from compassion fatigue. The compassion fatigue was common to both those without family

issues, and those with family issues and both had compassion fatigue. There were other factors either intrinsic or extrinsic responsible for compassion fatigue other than what was considered in this study.

### **Substance abuse versus compassion fatigue**

Compassion fatigue can trigger professional memories causing symptoms that can prove debilitating. The staff working in the critical care areas may forget why they wanted to help in the first place and take to excessive drinking or substance misuse in order to forget what they were going through. The levels of compassion fatigue increased from 75% and 100% for those who misuse drugs and alcohol. This study finding agree with another study by MC comm. and Jackson (1995) in south Africa who reviewed emergency profession and found that they had high levels of compassion fatigue, predisposing them to substance abuse (21).

### **Working environment and compassion fatigue**

A good working environment should be created for workers at the critical care areas. Most of staffs rated the environment as fair. Those who rated the environment as fair had levels of compassion fatigue increasing from 21.2% to 57.6% both for high and extremely high risk of compassion fatigue. There was no statistically significance difference between work environment and compassion fatigue ( $P = .336$ ). This study agrees with a study by Buton (2002) that organization performing a lot of trauma work predisposes the staff to compassion fatigue and hence need to employ counselor trained in treating secondary trauma and reacting to both the patient and their own issues. The finding agrees with their studies done in compassion fatigue in other part of the world (8,10,12,14).

## CHAPTER SEVEN 7.0

### 7.1 CONCLUSION

The hypothesis has been that there was no statistical significance difference between the prevalence of compassion fatigue among staffs working at the critical care areas of Kenyatta National Hospital.

The general objective of this study was to establish the levels of compassion fatigue among the critical care area worker of the hospital.

The study establishes the existence of compassion fatigue among the staff working at the hospital.

The compassion fatigue has been influencing the output and efficiency of their output negatively. There is therefore hence a need to address this process. The following organization can address the issue of compassion fatigue:

Ministry of health

K.N.H

Professional organization like the Nursing Council

The factors, which were investigated as courses of compassion fatigue, were independent from each other and hence compassion fatigue is likely to be one of the major problems affecting the health care delivery system.



## 7.2 RECOMMENDATIONS

There is need for professional organization to include in their training, the concept of compassion fatigue so that their students are aware of it when they experience it.

There is also need for the management of the institution (KNH) to educate the staff about compassion fatigue in order to be aware of it when it is experienced.

There is also need to carry out capacity building for managing of compassion fatigue in the critical care areas and the hospital in general.

There is need to carry out assessment of compassion fatigue among other workers not included in this study in order to assist all hospital workers in dealing with their compassion fatigue.

The hospital should appoint team leaders who should work closely with the medical workers in the critical care areas and monitor their level of compassion fatigue so as to put an intervention when it occurs

### **Peer support**

The staff working at the critical care areas should hold regular meetings aimed at supporting one another in case of a critical incidence.

### **Critical incident stress management**

The institution (KNH) should include an intervention strategy, which should be designed to prevent stress in persons working in this critical care areas of the hospital.

### **Individual consultation**

Mechanism should be put in place, which encourage individual staff to consult a professional in the event of compassion fatigue.

## REFERENCES

1. Fuglees, CR. Understanding. Cost of caring, Stamm B.H (ED) Secondary traumatic stress p 3-28 Ludherville MD Sidran press, 1995.
2. Kokonya D.A. Compassion fatigue and Burnout syndrome among medical workers at Kenyatta National Hospital, 2004. Mmed medical psychiatry dissertation UON.
3. George, JV Everly(1999). Critical incident stress management (CISM). A new era and standard of care in crisis intervention.
4. Maslach C. (1982). Burnout the cost of caring Engetwo cliffs, NJ: prence Itall
5. Maytum JC, Heiman MB, Garwich AW. Compassion fatigue and burn out in nurses who work with children with chronic condition and their families. J pediator Heal Care 2004 Jul – Agu 18 (4) 171- 9 Healthier Joglyn (2002).
6. Mbatha E. Vicarious Trauma among caretakers of Kakuma refugee camp, 2006. Medical psychiatry dissertation upon.
7. MC Cann, L, Pearlman (1990). Vicarious dramatization: A framework for understanding psychological effect of working with victim. *Journal of trauma*.
8. Abendroth, Maryann. predicting the risk of compassion fatigues. A study of hospice nurses. *Journal of hospice palliative nursing December 2006 8 (6): 346-356*.
9. Arches J (1991). social structure work, 36(3) 202 – 206 A report of the public child welfare workforce council on social work education statistic on social work education in United State.
10. Cohen et al. Multiple terrorist attack compassion fatigue in Israel social workers *sage journal online. Grammatology, vol 12 no.4 page 293 – 301*.
11. Dickson and Perry (1998). Why do MSWS stay in public welfare? Organization and training implicates of a retention study. California social work education centre.
12. Compassion fatigue following the September 11 Terrorist attacks. A study of secondary among New York city social workers.
13. Jayaratine S & Cess, W (1984) Job satisfactory burn out and turn over. A national study National Associate of social workers.
14. Curtios C, (1993) vicarious traumatization of the therapy, NCP clinical news letter 93.

15. Bell, Holly, Kulkarni, Shanti, social workers burnout organization prevention of vicarious trauma section no. 4 vol. 84 pg 463
16. Um, M & Harrison D (1998). Role stressors, burnout mediators, and Job satisfaction a stress – strain outcome model and an empirical test, *social work resources* 22(2), 100- 115
17. Wood all S, Joseph. *The Australasian journal of disaster and trauma studies* vol. 1.
18. MC Cann IL, Pearlman LA. Vicarious Traumatization a psychological effect of working with victims. *J traumatic stress* 3: 131-149, 1990. *stress vol. 3.1.*
19. Samantran K. (1992). Factors in the decision to leave, *Retaining social works with MSWS in public welfare social work* (37) (5) 454-458.
20. Miri sasin (2006). multiple terrorist attack, compassion fatigue in Israel socialWorkers. *Traumatology*, Vol. 12 NO 4, 293-301
21. MC Common, Susan et al (1988). Emergency workers cognitive appraisal and coping with traumatic event. *Journal of traumatic stress vol.(3) 353 –372.*
22. Acora, Hinari. Nursing theory and concept development an analysis. Burnout contagion among intensive care nurses, *journal of advanced nursing volume 51* pages 276 – august 2005.
23. Adkinson, Luren, Fullen ksaship (2003) compassion fatigue in public Health Nurses working on Disaster Relief Teams.
24. America psychiatric association diagnostic and statistical manual of mental disorders. Third edition Washington DC 1980.
25. C. Maslash, WB Shuafell, MP Leiter. Annual review of psychology ( 2001) such as mental or emotional exhaustion fatigue and depression survivors bias those who burn out early.
26. C. Cenvy, Baranousky and Dunnry. Accelerated recovery program for compassion fatigue. Thirteen annual international society for traumatic stress
27. Figley, C.R and Stamm, BH (1996). Psychometric review of compassion fatigue self test.
28. Glisson C & Hemmelgan A (1997). The effect of Organization climate and Inter organizational coordination of children’s service system child abuse & neglect (22) 5 401 – 421

29. Josly, H. How compassion fatigue can overwhelm charity workers and what to do about it. *The Chronicles of Philanthropy's*
30. Keeske, GF, & Koeske, R.D (1989). Work load and burn out can social support and perceived accomplishment help social work 34 (30) 29 – 36.
31. Levin P. Gift from within vicarious traumatic in attorneys abstract Columbia university (2003).
32. Maslach C & Jackson SE (1982) Burnout syndrome in health professions: A social psychological analysis. In G.S. Sander and J Suls (EJS), *Social psychology of health and illness* 3<sup>rd</sup> Ed, pp 227 – 251).
33. Woodall S, Joseph. *The Australasian journal of disaster and trauma studies* vol. 1.
34. Um, M & Harrison D (1998). Role stressors, burnout mediators, and Job satisfaction a stress – strain outcome model and an empirical test, *social work resources* 22(2), 100- 115
35. Susan Marcus and Michael Dub. The relationship between Resilience and compassion fatigue in counselors. Joseph A. Bascoviso, Charles R. Fisley and Richard Aden
36. Century Baranowsky and Dunning. Accelerated recovery program for compassion fatigue, Thirteenth annual international society for traumatic stress studies conference Monstred QB CAN Nov 9, 1997.
37. Verstraete, P.A (1992) Burnout stress syndrome in child protection Colorado's children 12 (1) 4-7, fall winter.

## ANNEXES

### INSTITUTION CONSENT EXPLANATION FOR KENYATTA NATIONAL HOSPITAL

My name is John Kariri a Master of Science in Clinical Psychology student at the Department of Psychiatry, University of Nairobi. I have chosen to write my dissertation on the extent of compassion fatigue among the critical care area staff in your institution.

I will interview the staff using self-administered questionnaires, a social demographic questionnaire and an internationally used instrument, for assessing compassion fatigue.

The overall result will help us understand the extent of compassion fatigue among critical care area workers. The study results can be used to improve the lives of the caretakers and hence improve the quality of care offered to the patients.

I will get the necessary official approval from Kenyatta National Hospital ethical committee and make them available to you before the study begins.

Yours faithfully,

John Kariri

Msc. Clinical Psychology Student

Department of Psychiatry

University of Nairobi

# CONSENT FORM FOR PARTICIPANTS IN THE STUDY OF COMPASSION FATIGUE AMONG STAFFS WORKING AT THE CRITICAL CARE AREAS.

## **Consent explanation for study participants**

### **Introduction**

My name is John Kariri from the Department of Psychiatry University of Nairobi. I am doing a research to understand the extent of compassionate fatigue among critical care area workers. I will use the same information for my Master's degree in Clinical Psychology in the same University.

I have got permission from the management of the institution to talk to you. The research ethical committee of this hospital has also cleared the study.

I am requesting you to participate in a research to study the extent of compassion fatigue among critical care workers.. If you agree to participate I will require you to read and respond appropriately to a list of questions below that ask you about your personal detailed and also about issues to do with how you have been feeling.

The exercise should not take more than 30 minutes.

### **Risk of study**

The only risk of the study would be a reminder of your feelings, which can bring some discomfort.

### **Benefits**

There will be no direct benefit for you for participating in this study. If however you identify with any of the symptoms, you are encouraged to consult confidentially. Since all the information will be in confidence and will not be able to identify you. It means that I will not know you even if I find abnormality on analyzing your questionnaire. Do feel free to call me on the number provided. The results of this study and recommendations will be communicated to the Hospital Administration.

### **Confidentiality**

Besides getting information from you, confidentiality will be maintained. The in charges of the Hospital and your area in charge will not know your responses.

To ensure confidentiality I will not require your name but only a code number, which I will allocate to you.

If you choose to join the study then answer the following questions to the best of your ability. If you choose to fill this questionnaire at home during your free time you can be allowed two days to do so.

The completion of this questionnaire will be the consent to participate.

Yours sincerely,

John Kariri

Master of Science in Clinical Psychology student

Department of Psychiatry

University of Nairobi

Tel: 0721546040

**CONSENT FORM**

I hereby consent to participate in this study of compassion fatigue among critical care area workers of Kenyatta National Hospital. I have been explained and understand the nature and purpose of this study.

**Participants signature** .....

**Date** .....

**Interviewers name** .....

**I interviewers signature** .....

**Date** .....

**Serial NO** .....



## SOCIAL - DEMOGRAPHIC DATA

1. Study No.

2. Religion

(i) Catholic

(ii) Protestant

(iii) Muslim

(iv) Others (Specify) \_\_\_\_\_

3. Gender

(i) Male

(ii) Female

4. Age in years \_\_\_\_\_

5. Marital status

(i) Married

(ii) Single

(iii) Widowed

(iv) Divorced

(v) Separated

(vi) Cohabiting

(vii) Others (specify) \_\_\_\_\_

6. No of Children \_\_\_\_\_

## DATA RELATED TO DEPARTMENT WORK

7. Which unit do you work

Burns unit

Intensive care unit

Renal unit

8. What is your current employment status

(i) Permanent

(ii) Contract

(iii) Temporary

(iv) Others (specify) \_\_\_\_\_

9. Which cadre of staff are you?

- (i) Doctor
- (ii) Nurse
- (iii) Physiotherapy
- (iv) Occupational therapy
- (v) Medical
- (vi) Engineering
- (vii) Laboratory
- (viii) Support staff
- (ix) Others (specify) \_\_\_\_\_

10. Highest educational level

- (i) Class 7 - 8
- (ii) Form 1 - 4
- (iii) College
- (iv) University

11. How long have you worked in this unit? \_\_\_\_\_

12. Outside the unit work how many hours on average do you spend on

- (i) Extra work to earn a living
- (ii) Leisure
- (iii) With family
- (iv) Sleeping

13. How many days per year are you entitled for annual leave?

- (i) 24
- (ii) 21
- (iii) 30
- (iv) Others (specify) \_\_\_\_\_

14. Do you surrender your leave in lieu of money                      Yes                       No

**ADMINISTRATION**

15. Are you satisfied with your current job? Yes  No

(b) In this unit what is your job title .....

16. If given an opportunity outside your department, would like to change?

Yes  No

If yes give reasons \_\_\_\_\_

17. In the last one month how many days have you taken sick off \_\_\_\_\_

18. In describing your work, you are

(i) Under worked

(ii) Overworked

(iii) Do normal job

(iv) Others (specify) \_\_\_\_\_

**SOCIAL SUPPORT**

19. Are there things in your family that negatively affect your work performance?

Yes  No

20. Have you in the last one month increased the intake of

(i) Alcohol

(ii) Drugs

(iii) Others (specify) \_\_\_\_\_

21. How do you like environment where you work in?

(i) Poor

(ii) Fair

(iii) Good

(iv) Very good

Consider each of the following characteristics about you and your current situation.

Write in the number for the best response. Use one of the following answers.

1=Rarely 2= A time 3= Not sure 4=Often 5= very often

Answer all items even if not applicable.

Item	Rarely	At times	Not sure	Often	Very often
1. I force myself to avoid certain thoughts or feeling that remind me of a frightening experience					
2. I find myself avoiding certain activities or situation because they remind me of a frightening experience					
3. I have gaps in my memory about frightening events					
4. I feel estranged from others					
5. I have difficult falling or staying a sleep					
6. I have outburst of anger or irreparability with little provocation					
7. I startle easily					
8. While working with a victim I thought about violence against the perpetrators					
9. I am sensitive person					
10. I have had flashback connected to my patients and their facilities					
11. I have had first hand experience with traumatic events in my adult life					
12. I have had first hand experience with traumatic event in my childhood					

3. I have thought that I need to work "through" a traumatic experience in my life.					
4. I have thought that I need more close friends					
5. I have thought that there is no one to talk with about highly stressful experiences					
6. I have concluded that I work too hard for my own good.					
7. I am frightened of thing a patient and their families has said or done to me.					
8. I experienced trouble dreams similar to a patient of male and their family					
9. I have experienced intrusive thoughts of session with especially difficult patient and their families					
0. I have suddenly and involuntarily recalled a frighten experiences while working with a patient and their family					
1. I am preoccupied with more than one patient and family					
2. I am losing sleep over a patient and their families traumatic experiences					
3. I have thought that I might have been" infected" by the traumatic stress of my patient and their families					
4. I remind my self to be less concerned about the well being of my patient and their families.					
5. I have felt trapped by my work as parishioners.					
5. I have a sense of hopelessness associated with working with certain patients and their families					

7. I have felt on edge about various things and I attribute this to working things and I attribute this to working with certain patients and their families					
8. I have wished that I could avoid working with some patients and their families					
9. I have been in danger working with some patients and their families					
10. I have felt that some of my patient and their families dislike me personally					
11. I have felt weak, tired, run down as a result of my work as a practitioner.					
12. I have felt distressed as a result of my work as a practitioner					
13. I am unsuccessful at separating work from personal life					
14. I felt little compassion toward most of my coworkers					
15. I feel I am working more for money than for personal fulfillment.					
16. I find it difficult to separating my personal life from my work life					
17. I have a sense of worthlessness/disillusionment/resentment association with my work.					
18. Have thought that I am a "failure" as a fractioned					
19. I have thought that I am not successful at achieving my life goals					
20. I have to deal with bureaucratic unimportant task in my work life					