#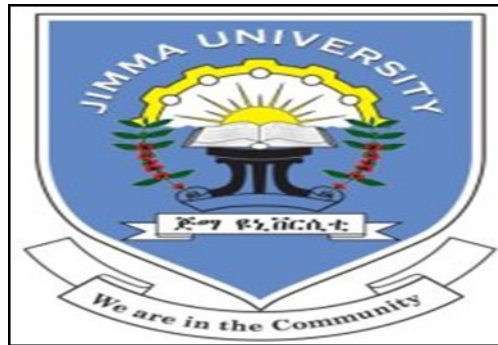 PREVALENCE OF MENTAL DISTRESS AND ASSOCIATED FACTORS AMONG HEALTH PROFESSIONALS WORKING IN JIMMA UNIVERSITY TEACHING HOSPITAL, SOUTH WEST ETHIOPIA

BY: BIKSEGN ASRAT (BSc)

A RESEARCH THESIS TO BE SUBMITTED TO THE DEPARTMENT OF PSYCHIATRY, COLLEGE OF PUPLIC HEALTH AND MEDICAL SCIENCES, JIMMA UNIVERSITY, IN PARTIAL FULFILMENT OF THE REQUIRMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN INTEGRATED CLINICAL AND COMMUNITY MENTAL HEALTH

MAY, 2014

JIMMA, ETHIOPIA

PREVALENCE OF MENTAL DISTRESS AND ASSOCIATED FACTORS AMONG HEALTH PROFESSIONALS WORKING IN JIMMA UNIVERSITY TEACHING HOSPITAL, SOUTH WEST ETHIOPIA

BY: BIKSEGN ASRAT (BSc)

ADVISORS: ESHETU GIRMA (BSc, MPH, Ass. Prof.)

MATIWOS SOBOKA (BSc, MSc ICCMH)

KENFE TESFAY (BSc, MSc ICCMH)

MAY, 2014

JIMMA, ETHIOPIA

STATEMENT OF THE AUTHOR

By my signature below, I declare that this thesis is my own work. I have followed all ethical principles in the preparation of this thesis. I have given all scholarly matter recognition through citation and reference. I have made every effort to avoid plagiarism.

I submit this thesis in partial fulfillment of the requirement for a master's degree from Jimma University. I solemnly declare that I have not submitted this thesis to any other institution anywhere for the award of any academic degree, diploma, or certificate. Jimma University may grant permission for extended quotations or reproduction of this thesis. In all other instances, however, the author of the thesis or advisors must grant permission.

Name: Signature: _____

Date:

Acknowledgment

Abstract

Background: Mental distress is a syndrome of mental disturbance manifested by behavioral, psychological, and physiological reactions to a significant stressor.

Objective: To assess the prevalence of mental distress and associated factors among health professionals working in JUTH, south west Ethiopia.

Method: This study was conducted using a cross-sectional study design. All health professionals were involved in this study from various disciplines. Self-report questionnaire (SRQ-20) was used to detect mental distress. Other structured questionnaire related to socio-demographic characteristics, burnout, working area condition, and substance use habit were used to collect data. Data were entered into SPSS version 16 and analyzed by using default (enter method). Multivariate logistic regression was used to identify the independent predictors of mental distress. In the final model, all variables with P-value <0.05 were declared to be significantly associated with mental distress.

Result: Out of the total participants (334), 29.9% (n=100) of them found to have mental distress. Prevalence of mental distress among women and men was similar (31.8% and 29.4% respectively). Mental distress was 4.47 times higher among participants with high burnout score (AOR=4.47, 95%CI=2.37-8.44). Additionally, the likelihood of developing mental distress among physically and verbally abused staffs was 2.34 times higher than their counterparts. Also it was more than two times higher among health professionals reported poor prospect of promotion than those who reported good prospect of promotion.

Conclusion: High prevalence of mental distress was found among health professionals. Identified association of mental distress with work related factors needs for immediate and far-reaching interventions in promoting health professionals by incentives, trainings and educational opportunities. JUTH also shall to work hard in prevention of burnout among these staffs and in preventing them from any kind of physical or verbal violence by implementing rules and regulations.

Key words: mental distress, health professionals, burnout, work related factors, south west Ethiopia

Table of Contents

Abbreviations/Acronyms

CAGE - Cute down, Angry, Guilty and Eye opener for alcohol

CBIS- Copenhagen's Burnout Inventory Scale

ETB - Ethiopian Birr

JUTH - Jimma University Teaching Hospital

SARS - Severe Acute Respiratory Syndrome

SPSS - Statistical Package for Social Sciences

SRQ - Self Reporting Questionnaire

WHO - World Health Organization

List of figures

List of tables

Chapter One: Introduction

1.1 Background

Mental health is defined as a state of wellbeing in which every individual realizes his or her own potential to cope with the normal stresses of life and is able to make a contribution to his or her community [1].

Currently, common mental disorders are big causes of morbidity and mortality globally which affects mainly the productive generation [2]. Different studies proved that the incidence and prevalence of mental disorders in the working population is getting increased in the last decades. Common mental disorders affect 15 up to 25 percent of working population globally [2, 3]. From emotional disorders, both anxiety and depressive disorders estimated to affect about one-sixth of the working age population. At least, every fifth person is suffering from severe symptoms of mental disorder which is affecting their day to day activities, social relationship, and financial income [4].

Mental distress is a mental disturbance which encompasses symptoms of psychiatric disorders in response to significant stressful conditions; manifested by prominent symptoms of sadness, frustration, fearfulness and with a number of somatic complaints which doesn't fulfill criteria for depressive or anxiety disorders [5]. It also characterized by unpleasant subjective states such as feeling tense, worried and worthless disturbance in an emotional condition that involves negative views of the self, others and the environment [6]. These subjective states can reduce the emotional resilience of individuals and put an impact on their ability to enjoy life and to cope with pain, disappointment and sadness.

World federation for mental health (WFMH) in 2010 released report regarding the necessity of integrating mental health with areas of development efforts such as education and human resource management. This is because non-communicable diseases like heart disease, diabetes, cancer and respiratory diseases as the new scourge, with the relationship to mental health is both intimate and unavoidable. World health organization (WHO) convinced lately as there is no health and development without mental wellbeing [7].

In Australia absenteeism from work due to mental distress costs $5.12 billion per year, average six working days of productivity were lost per individual per year. Mentally disturbed employees took nine times more sick leave than healthy employees [8]. Employers, employees and unions are starting to realize that mental disturbances are the single most important cause of disability responsible for a global burden of disease larger than the sum of disabilities resulted from infectious diseases, cancer and physical accidents which is contributing greater impact on global economy by affecting human resource through increasing absenteeism from work, sick leave, compensations and by other different reasons [9].

Mental distress is the most common problem among health professionals working in health care facilities due to psychosocial challenges, high work related stressors and other socio-economic factors. It is characterized by symptoms of anxiety and depression which is manifested by behavioral, psychological, physiological and mental reactions [7, 9].

Health profession is always demanding physically and mentally which requires careful and clever decisions in life and death issues in short span of time, with limited resources at hand especially at the time of medical emergency [10]. Their professional responsibility obligates health care providers to stand at frontline during time of their patients' crisis.

Although health care professionals of all grades have lower rates of many kinds of physical illness than the general population, contrarily they have higher rates of mental distress when compared with the general population [6, 11]. For instance, committing suicide among women and men doctors was 3.2 and 1.4 times higher than the general population respectively.

1.2 Statement of the problem

Mental distress is combination of abnormal thoughts, emotions and behavior which significantly affects normal life style of individuals in areas of self-efficacy, self-autonomy, competence and the ability to realize one's own intellectual and emotional potential [1, 12]. Currently, mental distress and substance use were the leading causes of disability and morbidity across the world [5, 12]. People with severe symptoms of mental distress are emotionally unstable, behaviorally neglecting their self-care, socially isolated, poor in communication and suffering from frequent somatic pains [4].

Work and work organization conditions affect psychological wellbeing of employees as a result of excessive working hours, time constraints for their families, conflict with staffs, role ambiguity and job insecurity. Poor chances for advancement (promotion), verbal or physical harassment from superiors, health and safety risks were also identified sources of mental distress at work place [8, 13, 14]

In member states of the European Union, costs associated with mental distress and other neuro-psychiatric disorders bring 3% to 4% loss from general national product in each country. Meanwhile in USA, cost estimated for care of depressed employees is ranging from $30 - $44 billion annually, with approximately 200 million working days lost each year in the same country [6, 9, 15]. Mental distress due to stressful working conditions is the second most compensated case to employees following musculoskeletal disorders in Australia [16].

Mental distress is common phenomenon among adult employees working in public and governmental health care organizations. As result it was found to be a big threat for institutions to deliver the required goals due to increasing in the turnover rate of staffs, shifting profession to non-clinical ones and early detection of burnout among employees were devastating in times of medical staff shortage [14]. Working environment and co-worker communication, administrative issues (office politics and competition), family relationship and level of income were found to be highly associated with the occurrence of mental distress among health professionals; especially when employees fail to purchase adequate food, clothing and services in their salary which affects their self-esteem as well as the sense of control over one's life [2, 17].

Sixty percent of lost work days each year were due to absenteeism, sick leave and unreasonable leave from work globally were attributed to mental distress. More than 75% visits to health care institutions in complaints of mental disturbance were due to stress related to work conditions. One-third of health professional employees consider quitting their jobs; complaining about emotional instability and unable to bear stressful conditions of their work [18, 19, 20]. Health care providers with mental distress may make procedural faults while providing care due to trouble in their focus, disorganization and anger.

Health professionals with mental distress could not deliver the required care and unable to play their crucial role to their health care facility and to their community especially in the time of advanced health care technologies, complex care processes, complex patient needs, and complex organizational systems [14, 20]. Most health professional are experiencing mental distress and burnout earlier in their professional carrier compared to other discipline professionals due to demanding nature of their profession [21]. Facing physical and verbal abuse from work mates, from patient and patients' families found to have a significant role for mental distress and it is a common challenge for health professionals to practice their work effectively [21, 22].

In Ethiopia there is limited information found about mental distress among health professionals. So, this study will fill the gap and it will be base line for further investigation.

Chapter Two: Literature Review

2.1 Overview

Currently, mental distress is a growing problem of all age groups working around the world due to increased demands for public services, work sophistication, lack of resources and higher level of responsibilities which are creating pressure particularly to health professionals [16]. A study conducted in University of Ulster, United Kingdom among nurses working in emergency medicine found that, 56% of them were having at least higher level of exhaustion, burnout and mental distress [23].

A cohort study done in Canada on public employers from 1994/1995 - 2006/2007 showed highest prevalence of mental distress over the period 2006/2007; which indicated as mental distress is getting increased in morbidity from time to time [2].

A survey conducted among Japanese nurses, showed that, 7% (n = 33) of the participants said ''I will resign from my current job within this 3 months" and they reported as they were forced to leave their work because of poor support from supervisors, cumulative fatigue due to workload and absence of role model [24]. Different studies stated as health care providers are practicing their work under high level of workload, role conflict, violence of their privacy [14, 25].

When employees perceive as their responsibility at work is to be more than they can handle it, they are likely to experience fatigue, mental distress and exhaustion which negatively affects their functioning [11, 15]. According to a study done in Malaysia among doctors working in public hospitals, work overload was a significant predictor for mental distress and conflict with work mates [26].

A study conducted in University of Limpopo, South Africa on 109 nurses' found that, the majority of respondents were unhappy with payment; 79% of them said they were not paid enough for what they did and for what they deserved; and 60% of them felt that the organization should increase their payment considering to their demanding work [27].

2.2 Prevalence of mental distress

In study conducted in Brazil in 2009, prevalence of mental distress was 24% among physicians [28]. A study done in Nepal among a tertiary care staffs working at different departments found that, 34.7% prevalence of mental distress among nursing staffs [29]. According to a study done in Australia among doctors, prevalence of mental distress was 28% [30]. A study done in Greece on 469 doctors, nurses, physiotherapists, social workers, psychologists and auxiliary (administration) staffs showed that, 20.7% prevalence of mental distress among these health professionals [17].

According to a study done in Addis Ababa, Ethiopia prevalence of mental distress among employees of Ethiopian commercial bank and teachers of public and government schools was 17.7% [31]. Another community based study done in Jimma, Ethiopia found that, 25.8% prevalence of mental distress [32]. Similar study conducted in Jimma Ethiopia on homicide offenders and suspects showed that, 35.9% prevalence of mental distress [33].

2.3 Socio-demographic factors

In study conducted in Netherland in 2009 among 959 medical doctors from 23 subspecialties who were working in medical centers found that, the prevalence of anxiety disorders among female physicians (20%) was higher than male physicians (9%) [34].

A study conducted in Greece among 469 medical doctors, nurses, allied staffs (physiotherapy, laboratory technician and pharmacist) and auxiliary (administrative) staffs to assess mental distress and associated factors. From this study nursing profession was independent predictor of mental distress (p=0.046) [17]. A similar study done in Queensland, Australia showed that, doctors with in age groups above 50 years old was significantly associated with mental distress (p=0.002) [30].

A study conducted in Ghana, Acraon and Pantang Psychiatric Hospital among nurses working in OPD, Wards and Rehabilitation units showed that, the higher the age of the nurse, the more he or she is exposed to mental disorders. Nurses who had served for a period of 5 and more years were showed that higher scores for depression, anxiety and stress followed by those who had served for a period of 1-2 years and 3-4 years [35].

A study done in republic of Somaliland among 120 doctors and nurses who were working in intensive care unit of two hospitals in Hargesa showed that, work experience, marital status (single and divorce), and age were significantly associated with above the mean score of stress (*32.0 ± 11.80*) [36].

According to a study done in Addis Ababa Ethiopia among employees of Ethiopian commercial bank and teachers of public and government schools showed that, highest prevalence of mental distress (35.5%) among younger participants (age ≤24 years); and mental distress was 2.47 fold higher among women compared with men [31].

2.4 Work related factors

A study done in Netherland among medical doctors showed that, burnout was significantly associated with mental distress (p<0.001) [34]. A study done in Chili among physicians and nurses' showed that, not being interested in once profession was significantly associated with higher scores of mental distress [37]. Also a study done in England found that, highest percent of mental distress among medical staffs who were working in accident, emergency medicine and intensive care units [23]. Another study done in Iran found a significant correlation between interest to work (P=0.001) and mental distress [38].

A study conducted in Massachusetts, USA among doctors found that, doctors who had poor relationships were had higher prevalence of mental distress than doctors with good relationship [39]. Similar study done in Australian showed that, work place violence increased the chance of having mental distress among hospital nurses [40]. According to study done in Germany, burnout, aggression and depressive behavior of colleagues was significantly associated with mental distress [41].

A study done in United Kingdom among health professionals showed that, statically significant association of mental distress with role ambiguity, lack of managerial support, interpersonal problem with supervisor (e.g. harassment), problems of physical environment (e.g. no window and extreme heat), poor prospect of promotion, and job insecurity [42].

A study done in Taiwan among health professionals revealed that, health professional staffs (17%, n=36) were having higher prevalence of anxiety disorders than administrative personnel

staffs (8%, n=6). Similarly, prevalence for fear of getting infected by SARS was higher among health professionals (37%, n=81) than administrative staffs (30%, n=23); and working department was found to be significantly associated with acute stress disorder (p=0.002) [43]. Another study done in republic of Somaliland identified poor physical working environment as independent predictor of mean stress score (32.0±11.80) [36]. Similar study conducted in Iran among hospital nurses showed that, statically significant association between shift work and mental distress [44].

2.6 Medical/Mental health problems

A study conducted in University of Miami, USA revealed that, individuals with arthritis showed higher have prevalence of mental distress [45]. According to study done in Boston, USA among nurses who were working in teaching hospitals, mental distress was significantly associated with musculoskeletal disorders [46]. A similar study in United Kingdom among healthcare professionals showed that, history of mental illness was found to be independent predictor of mental distress (p=0.019) [42]

2.7 Substance use and distress

A study done in Thailand among health professionals found that, 1.20 to 1.35 times more likely to have mental distress among regular alcohol users; and 1.29 to 1.41 times more likely to have mental distress among regular smokers compared with their no-user peers [47].

A study done in Addis Ababa, Ethiopia showed that, moderate and heavy drinkers of alcohol were 1.26 times and 1.22 times more likely to have mental distress than non-drinkers respectively [31]. A study done in Jimma, Ethiopia among students in Jimma University, College of agriculture identified that frequently khat chewers were having higher prevalence of anxiety disorders (33.3% vs. 15.7%), and higher prevalence of depressed mood (43.8% vs. 16.7%) than rarely khat users [48]. Another community based study in Jimma, Ethiopia found that, significant association between khat use and mental distress. Also this study found that significant association between alcohol use and mental distress. Additionally, smoking cigarette was significantly associated with mental distress. Furthermore, higher prevalence of mental distress (34.7%) observed among khat users than non-users (20.5%) [32].
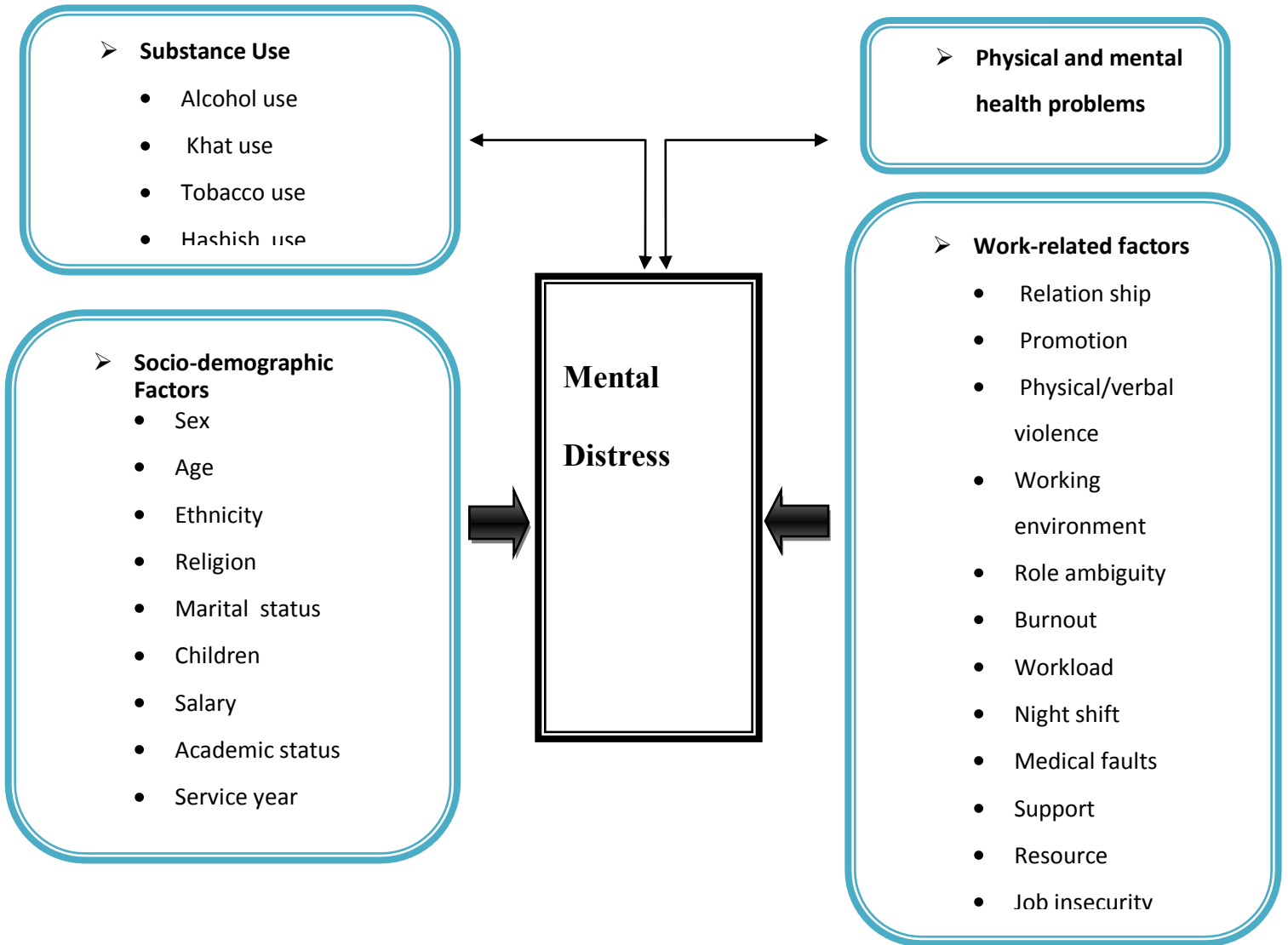
Figure 1: Conceptual framework of mental distress and associated factors among health professionals working in JUTH, 2013

2.8 Significance of the study

The chance of having mental and physical illnesses increase as people are getting exposed for variety of stressors in their life circumstance. Health professionals' encounter a variety of stressful conditions in their professional career due to the nature of their professional responsibilities as well as emotional pain what they share from their patients. The demanding nature of their job in terms of time constraint, workload, resource scarcity, and high level of responsibility may expose health professionals for unpleasant feelings, despair, and embarrassment. Their psycho-social role and socio-economic conditions may bring additional burden which may not allow them to enjoy their normal life. These kinds of stressful life conditions increase their vulnerability for mental morbidity.

Early alleviation of symptoms of mental distress by psycho-therapy is at least 32 times more cost effective than financial expenditure for care of individuals suffering from mental illness (6).

This study identified the magnitude of mental distress and contributing factors among health professionals working in JUTH. So, the result from this study will provide baseline information for all concerned bodies; administrative board and policy makers to design policies and strategies; and finally to improve mental wellbeing of health professionals.

Findings from this research can be utilized by stakeholders of JUTH and other health facility staffs. Decision makers, researchers and any interested individuals who need working in the area could use the findings of this study as baseline information for their further work.

Chapter Three: Objectives

3.1 General Objective

➢ To asses prevalence of mental distress and associated factors among health professionals working in JUTH 2013

3.2 Specific Objectives

➢ To estimate prevalence of mental distress among health professionals working in JUTH
➢ To identify the association of socio-demographic factors with mental distress among health professionals working in JUTH
➢ To assess the association of work related factors with mental distress among health professionals working in JUTH
➢ To assess the association of physical and mental health problems with mental distress among health professionals working in JUTH
➢ To assess the association of substance use and mental distress among health professionals working in JUTH

Chapter Four: Methods and Materials

4.1 Study area and period

This study was conducted from November 15, 2013 to December 15, 2013 at JUTH, which is found in Jimma town. Jimma town is located in Oromia regional state 346km away from Addis Ababa, the capital city of Ethiopia to the south-west. JUTH is a teaching hospital which was established in 1930 E.C by Italians at the time of Ethio-Italy war. At that time it was giving service for Italian forces. Following the defeat of Italy the hospital was giving service for Jimma town and the nearby rural and urban communities. Currently, it is serving more than 15 million people. JUTH has a total of 11 wards (inpatient department), 523 beds and 403 permanently employed health professional staff.

4.2 Study design

Cross-sectional study design was used.

4.3 Population

4.3.1 Source population

Health professionals who are working in JUTH

4.3.2 Study population

All permanent employee health professionals who are non-teaching staffs working in JUTH during the study period

4.4 Inclusion and exclusion criteria

4.4.1 Inclusion criteria

All health professionals working in JUSH during the study period

4.4.2 Exclusion criteria

➢ Health professionals who were recruited by Jimma University as both lecturer and clinician

➢ Health professionals who were on grief within two month prior to the day of data collection

➢ Health professionals who were providing a free service for the hospital

4.5 Sample size determination

Sample size was calculated using a single proportion formula by utilizing a proportion of 50% at 5% marginal error and standardized normal distribution of 95% confidence interval. The final sample size after finite population correction formula utilized and 10% non-response rate considered; was 216. It was found to be small to undertake this study, thus we aimed to include all 403 eligible health professionals.

4.6 Variables

4.6.1 Dependent variables

▪ Mental distress status

4.6.2 Independent variables

Socio-demographic variables
▪ Age
▪ Sex
▪ Religion
▪ Ethnicity
▪ Marital status
▪ Children
▪ Monthly salary
▪ Service year
▪ Academic status

Work related variables

- Level of burnout
- Interest in one's own profession
- Prospect of promotion
- Fear status of having/contracting illness
- Job security
- Perception about management system
- Medical fault condition
- Physical working environment
- Physical/verbal abuse status
- Perception of professional recognition
- Perception of professional role
- Relationship with colleagues and bosses
- Resources availability
- Professional support
- Perception of one's work load

Health condition variables

- History of mental health problems
- History of physical health problems

Substance related variables

- Alcohol use
- Khat use
- Tobacco smoking
- Hashish use

4.7 Data collection procedure

4.7.1 Instrument

The self-reporting questionnaire (SRQ-20) tool was used in this study to detect mental distress; and it was administered for data collection. This instrument was developed by the WHO to screen mental distress in primary health care settings and community of low-income countries [49]. SRQ is not expected to diagnose mental illness but it was designed to screen mental distress. It is used as a first-stage screening instrument which asks about features of mental distress with YES or NO responses in each question over the past 1 month [49, 50]. SRQ has been used widely for epidemiological studies in clinical and community settings in Ethiopia and in Africa [50, 51]. The Sensitivity and specificity of this instrument in community setting was 0.85 and 0.94 respectively [52]. Burnout was assessed by using Copenhagen's burnout inventory scale which was used and validated in different studies in Netherland, Denmark, Spain, Brazil, and South Africa [53, 54, 55, 56, 57]. It is useful tool to assess level of burnout of professionals working in health care. Alcohol use disorder was assessed by using CAGE tool which is used to detect alcohol use problems only and its disadvantage is unable to detect the severity of the problem. It is a valid and reliable screening tool for detection of alcohol use problems and it was used in different studies in Ethiopia. It consists of four simple questions asking multidimensional areas about alcohol use. Other structured questions were used to assess socio-demographic characteristics, health related conditions and substance use.

4.7.2 Data collectors selection and training

Data were collected by four second year mental health MSc students. One MPH student was employed to supervise data collectors. Based on WHO SRQ-20 training guideline, data collectors and the supervisor were trained for one day by the principal investigator on the study instrument, on consent form, how to maintain confidentiality, and on data collection procedure.

4.7.3 Data collection method

Self-administered data collection technique was utilized. Those data collectors were assigned to collect data during tea break time. The study subjects were given general information about the study objective as well as the opportunity or benefits that this study could bring. The principal

investigator and the supervisor were checking the filled questionnaires for consistency and completeness daily.

4.8 Data quality management

Pre-test was conducted on sample of 5% of the total study population on health professionals who were working in Kochi Mendera health center which is found in Jimma town. Pre-test questionnaire was not included in the analysis as part of the main study. English version of questionnaire was used for data collection. Regular supervision by the supervisor and principal investigator was carried out. Each day during data collection, filled questionnaires' were cheeked for completeness and consistency

4.9 Data processing, analysis, interpretation and presentation

Data were coded, entered, cleaned, and analyzed by using SPSS version 16. Dependent and independent variables were entered in to bivariate logistic regression one by one to detect association of independent variables with outcome variable. Age, salary and service year were entered to bivarate logistic regression considered as continuous variables to identify their association with mental distress. All variables associated with mental distress, and with p-value $\leq$ 0.25 were entered to multivariate logistic regression once by entered method (by default) in order to control potential confounders. Variables with p-value less than 0.05 in multivariate regression were declared to be independent predictors of mental distress. The findings of this study were presented in tables and graph.

4.10 Ethical consideration

Ethical clearance was obtained from Jimma University, College of Public Health and Medical Sciences. Permission letter was obtained from JUTH. Detailed information about the study was explained to all participants before starting data collection. Informed consent was obtained from each participant before starting data collection. Study participants had the right not to participate in the study and to withdraw from the study at any time. The anonymity of study participants were kept at every stage of date processing. Those participants who marked (said YES) for suicidal idea were advised at the footnote below SRQ questions to contact the supervisor

personally. The supervisor referred participants with suicidal ideation to psychiatric clinic for further evaluation when they had contacted him personally.

4.11 Dissemination plan

Findings of the study will be submitted to Jimma University (school of graduates studies and department of psychiatry) and JUTH. The research report will be submitted to all relevant stakeholders through reports and presentations. Effort will be made to get the findings published in a peer reviewed journal.

4.12 Operational definitions

Alcohol use disorder: Is a social, occupational and physical impairment resulted from maladaptive use of alcohol. It was detected by using CAGE scale with 2 and more scores.

High burnout: Is a state of prolonged physical and psychological exhaustion which is perceived as persistent negative attitude to the job and reduced in work efficiency. It was defined with mean scores of 43.39 ± 1.91 and above using 19 items of CBI tool [53].

Current substance user: When the health professionals use a specified substance for non-medical purposes in the last 12 months.

Ever substance user: When the health professionals use specified substance for non-medical purposes at least once in their life time.

Health professionals: Are professionals who had direct involvement in health care service; such as physicians, nurses, pharmacist/druggist, laboratory technicians/ technologists, physiotherapist, anesthetist, sanitarian, x-ray technician and others

Mental distress: Is psychological and emotional disturbance characterized by feelings of anxious and depressed state; which affect normal functioning of individuals. It was screened by using the SRQ-20 items with cut-off point 6 and above scores [49].

Physical/verbal abuse: It is any verbal or physical violence against the health professionals.

Physical working environment: Is the convenience of the working setup, office or unit perceived by the care giver in terms of quietness, cleanliness, ventilation and accessibility.

Promotion: Is a reward provided to the health professionals in terms of position, money, and opportunity of training and education based on his/her work efficiency and academic status.

Relationship: Is a communication, interaction and exchange of information in harmony way between peers, immediate boss and managers.

Resources: Is a kind of materials including gloves, drugs and other equipments used for patient care as well as used for health professionals to prevent themselves from contamination.

Support: Is a professional assistance in terms of information or material between the health professionals, between health professionals and immediate boss as well as managers.

Chapter Five: Result

5.1 Characteristics of participants

Among 403 permanent employee health professionals of JUTH; 334 of them participated in this study, with response rate of 83%. The rest of health professionals were not included in this study because of unwillingness to participate in the study and absence from work place during data collection period. Majority of the participants were male (64.7%, n=213) and the mean age (standard deviation) of participants was 28.6±7.65 years. The mean monthly salary of the study participants was 2119.9ETB with standard deviation of 772.09 and mean of service year was 4.57 with standard deviation 6.61.

Half of the total participants were single in marital status (50.2%) and 3.3% (n=11) were divorced. Three-fourth of the participants were nurses. Out of the total participants majority (52.0%, n=172) of them were first degree holders (See table 1). Eventhough monthly salary analyzed as continous variable to identify its association with mental distress, it was grouped by quartile to know its prevalence destribution among age groups with crosstabulation.

Table 1: Socio-demographic characteristics of health professionals working in JUTH, December, 2013 (n=334)

Socio-demographic variables		Number	%
Sex	**male**	**213**	**64.7**
	Female	**116**	**35.3**
Religion	**Orthodox**	**156**	**46.7**
	Protestant	**108**	**32.3**
	Islam	**63**	**18.9**
	Others[1]	**7**	**2.1**
Ethnicity	**Oromo**	**166**	**49.7**
	Amhara	**92**	**27.5**
	Tigre/wolayta/Guragie	**33**	**9.9**
	Dawuro/keficho	**24**	**7.2**
	Others[2]	**43**	**5.7**
Marital status	**Single**	**167**	**50.2**
	Married	**114**	**34.2**
	In relationship	**39**	**11.7**
	Divorced/widowed	**13**	**3.9**
Monthly salary (ETB)	**≤1434**	**85**	**25.4**
	1435-2190	**83**	**24.9**
	2191-2602	**102**	**30.5**
	≥2603	**64**	**19.2**
profession	**Nurse**	**237**	**71.8**
	Pharmacist	**29**	**8.8**
	Lab. technologist	**25**	**7.6**
	Physician	**15**	**4.5**
	Others[3]	**24**	**7.3**
Academic status	**Degree**	**172**	**52.0**
	Diploma	**138**	**41.7**
	General practitionar	**11**	**3.3**
	Others[4]	**10**	**3.0**
Have children	**No**	**223**	**66.8**
	Yes	**111**	**33.2**

---

[1] Catholic, Jehovah and no religion
[2] Yem, Harari, Siltie
[3] Psychiatrist nurse, Physiotherapist, anesthetist nurse and sanitary environmentalist
[4] Specialist and master degree

5.2 Prevalence of mental distress

Prevalence of mental distress among health professionals working in JUTH was 29.9% (n=100). Of the total participants 31.8% (n=35) of women and 29.4% (n=62) of male were found to have mental distress respectively. Out of the total study participants 34.8% (n=31) of Amhara and 26.5% (n=43) of Oromo ethnic groups were found to have mental distress (See table 2).

Out of the total participants, 47.4% (n=91) were identified to have high score of burnout (above the mean score). Prevalence of mental distress among health professionals who found to have high burnout score was 51.8% (n=58). The prevalence of mental distress among health professionals working at inpatients department was 37.0% (n=54). Prevalence of mental distress among participants who were working at night shift most of the time in the last one month was 34.2% (n=51). (See table 3).

Prevalence of mental distress among staffs with history of physical and mental health problems was 46.2% (n=30) and 34.2 % (n=13) respectively.

Among the total study participants, 34.4% (n=115), 26.6% (n=89), 10.2% (n=34), 5.4% (n=18) were current alcohol drinkers, khat chewers, tobacco smokers and shisha users respectively. From the total participants, 14.4% (n=48) of them were found to have alcohol use disorder (CAGE≥2). Prevalence of mental distress among health professionals with alcohol use disorder was 50.0 % (n=24). Similarly, over all prevalence of mental distress among current khat users and current tobacco smokers was 44.0% (n=37) and 57.6% (n=19) respectively (See table 4).
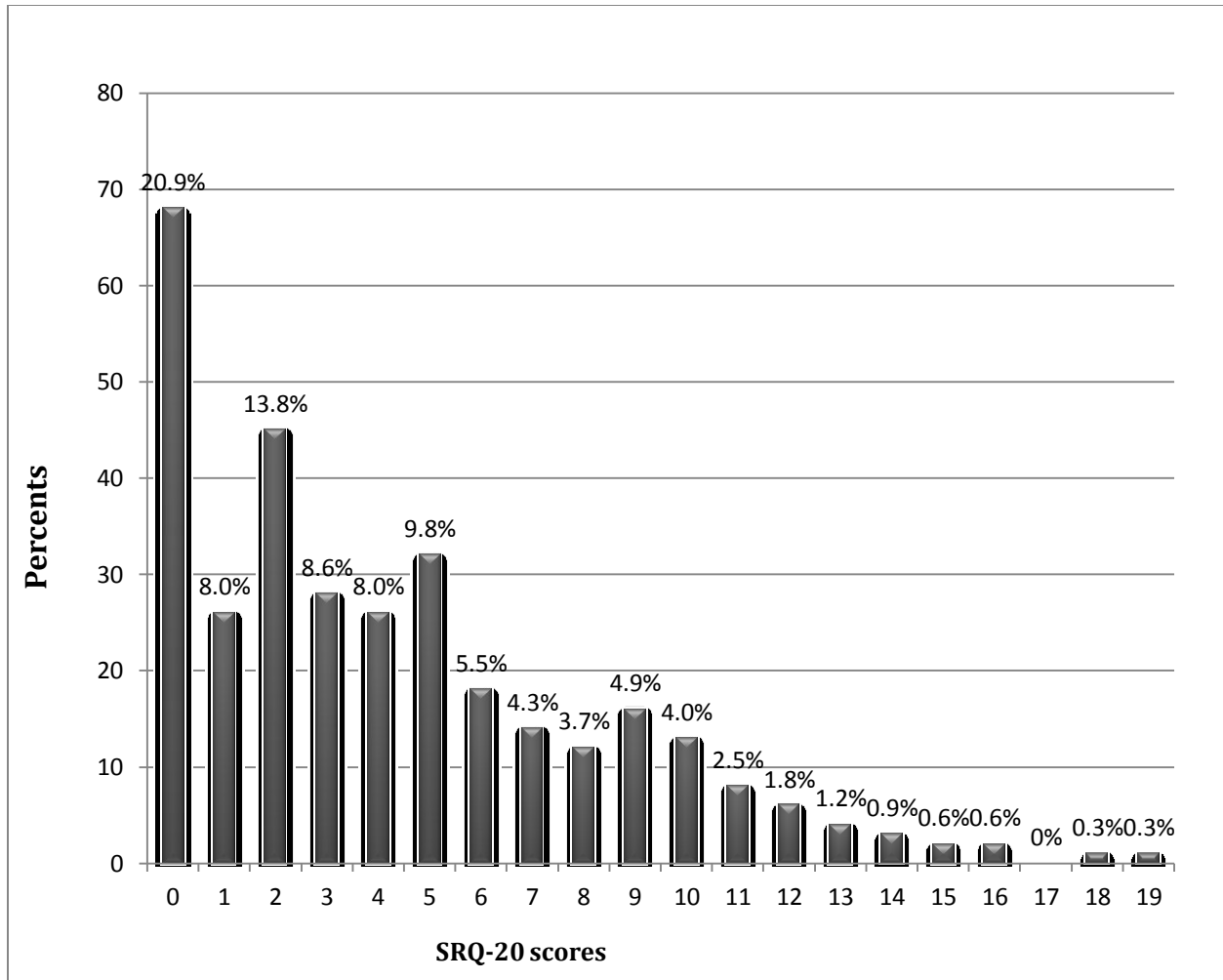
Figure 2: Distribution of SRQ-20 item scores among health professionals working in JUTH, December 2013 (n=334)

5.3 Socio-demographic factors

Prevalence of mental distress among divorced and widowed group of study participants was 41.7% (n=5) and it was 39.1% (n=59) among orthodox christians. 34% (n=31) Amhara and 26.5% (n=43) Oromo ethnic groups were found to have mental distress. Similarly, participants who had no child were showed slightly higher prevalence of mental distress (32.7%, n=71) when compared with those who had atleast one child (26.9%, n=29). Age, monthly salary, and service year were not showed a significant association with mental distress (see table 2).

Table 2. Bivariate logistic regression: Association of socio-demographic variables with mental distress among health professionals working in JUTH, December, 2013(n=334)

Variables		Mental distress		COR(95%CI)	p-value
		Yes	No		
		No (%)	No (%)		
Sex	Male	62(29.4)	149(70.6)	Ref.	
	Female	35(31.8)	75(68.2)	1.12(0.68, 1.85)	**0.652**
Religion	Orthodox	59(39.1)	92(60.9)	2.57(1.44, 4.58)*	**0.001**
	Protestant	21(20.0)	84(80.0)	Ref.	
	Other[5]	20(29.0)	49(71.0)	1.63(0.81, 3.31)	**0.174**
Ethnicity	Oromo	43(26.5)	119(73.5)	Ref.	
	Amhara	31(34.8)	58(65.2)	1.48(0.85, 2.59)	**0.169**
	Tigre/Wolayta/Gurage	11(55.0)	9(45.0)	1.45(0.65, 3.25)	**0.368**
	Other[6]	15(27.8)	39(72.2)	1.54(0.75, 3.16)	**0.242**
Marital status	Single	55(33.7)	108(66.3)	1.44(0.85, 2.46)	**0.180**
	Married	29(26.1)	82(73.9)	Ref.	
	Divorced/Widowed	5(41.7)	7(58.3)	2.02(0.59, 6.86)	**0.260**
	Have boy/girl friend	11(28.9)	27(71.1)	1.15(0.51, 2.61)	**0.735**
Have children	No	71(32.7)	146(67.3)	1.33(0.79, 2.21)	**0.281**
	Yes	29(26.9)	79(73.1)	Ref.	
Academic status	Diploma	45(33.8)	88(66.2)	1.92(0.70, 5.24)	**0.205**
	Degree	50(29.8)	118(70.2)	1.11(0.41,3.03)	**0.837**
	Others[7]	4(19.0)	17(81.0)	Ref.	
Profession	Physician	4(26.7)	11(73.3)	1.09(0.25, 4.75)	**0.908**
	Nurse	72(31.4)	157(68.6)	1.38(0.52, 3.61)	**0.517**
	Pharmacist	9(31.0)	20(69.0)	1.35(0.40, 4.54)	**0.628**
	Lab. technologist	7(29.2)	17(70.8)	1.24(0.35, 4.43)	**0.746**
	Others[8]	6(25.0)	18(75.0)	Ref.	

Key. (*) significant association

[5] Muslim, Jehovah, no religion and others (unlisted)
[6] Dawro, Keficho, Yem, Harari and siltie
[7] Medical doctor (general doctor and specialist), masters degree
[8] Psychiatrist nurse, Physiotherapist, anesthetist nurse and sanitarian

5.4 Work demand variables

Mental distress was nearly three times higher among participants encountered verbal or physical abuse (42.7%, n=61) compared with their counterparts (21.1%, n=38). According to our result participants identified to have high score of burnout (above mean score of 43.39±1.19) were showed higher prevalence of mental distress (51.8%, n=58) than participants scored below the mean. Similarly, participant's committed medical faults during patient care were showed 2.4 times higher prevalence of mental distress (47.2%, n=25) than those who didn't have history of medical faults in the last one month (27.4%, n=74) (See table 3).

Table 3: Bivariate logistic regression: Association of work related factors with mental distress among health professionals working in JUTH, December, 2013(n=334)

Variables		Mental distress		COR(95%CI)	p-value
		Yes	No		
		No (%)	No (%)		
Working dep't	OPD	12(23.1)	40(76.9)	1.80(0.35, 9.19)	0.480
	IPD	54(37.0)	92(63.0)	3.52(0.76, 16.33)	0.108
	OR	5(25.0)	15(75.0)	2.00(0.33, 12.18)	0.452
	ICU	6(33.3)	12(66.7)	3.00(0.50, 17.95)	0.229
	Laboratory	6(27.3)	16(72.7)	2.25(0.39, 13.17)	0.368
	Pharmacy	2(14.3)	12(85.7)	Ref.	
	Others	14(26.9)	38(73.1)	2.21(0.44, 11.14)	0.336
Perception of one's professional role	Yes	83(28.7)	206(71.3)	Ref.	
	No	15(45.5)	18(54.5)	2.07(1.00, 4.30)	0.051
Pare time work/ Attending school	Yes	23(25.6)	67(74.4)	Ref.	
	No	76(32.5)	158(67.5)	1.40(0.81, 2.42)	0.227
Night shift work	Yes	51(34.2)	98(65.8)	1.38(0.86, 2.21)	0.188
	No	48(27.4)	127(72.6)	Ref.	
Interest of one's own profession	Yes	36(21.3)	133(78.7)	Ref.	
	No	63(40.6)	92(59.4)	2.53(1.55, 4.12)*	0.001
Medical faults status	Yes	25(47.2)	28(52.8)	2.37(1.30, 4.32) *	0.005
	No	74(27.4)	196(72.6)	Ref.	
Physical/verbal abuse	Yes	61(42.7)	82(57.3)	2.78(1.71, 4.53) *	0.001
	No	38(21.1)	142(78.9)	Ref.	
Support regarding work	High	90(29.1)	219(70.9)	Ref.	
	Low	6(40.0)	9(60)	3.65(1.27, 10.55)*	0.017

Relationship at work place	Good	48(24.4)	149(75.6)	Ref.	
	Not good	50(40.0)	75(60.0)	2.07(1.28, 3.36) *	0.003
Perception of management system	Good	29(21.5)	106(78.5)	Ref.	
	Not good	69(36.9)	118(63.1)	2.14(1.29, 3.55) *	0.003
Level of burnout	High	58(51.8)	54(48.2)	4.40(2.66,7.29) *	<0.001
	Low	41(19.6)	168(80.4)	Ref.	
Prospect of Promotion	Good	33(21.4)	121(78.6)	Ref.	
	Poor	63(37.7)	104(62.3)	2.22(1.35, 3.65) *	0.002
Perception of work load	Yes	90(32.1)	190(67.9)	0.54(0.25, 1.18)	0.122
	No	9(20.5)	35(79.5)	Ref.	
Perception of working environment	Suitable	21(18.3)	94(81.7)	Ref.	
	Not suitable	76(36.7)	131(63.3)	2.60(1.50, 4.51) *	0.001
Perception of professional Recognition	Yes	36(23.7)	116(76.3)	Ref.	
	No	63(36.6)	109(63.4)	1.86(1.15, 3.03) *	0.012
Appropriate salary	Yes	12(22.2)	42(77.8)	Ref.	
	No	87(32.3)	183(67.8)	1.66(0.83, 3.32)	0.148
Resource availability	Yes	73(36.5)	127(63.5)	2.09(1.25, 3.49) *	0.005
	No	27(21.6)	98(78.4)	Ref.	
Fear of contracting an illness during work	Yes	66(38.2)	107(61.8)	2.21(1.35, 3.61) *	0.002
	No	33(21.9)	118(78.1)	Ref.	
Job insecurity	Yes	35(39.8)	53(60.2)	1.74(1.04, 2.90) *	0.035
	No	65(27.5)	171(72.5)	Ref.	

Key. (*) significantly associated

5.5 Health related factors

Out of the total health professionals included in this study, 21% (n=60) and 11.4% (n=38) of them reported as they encountered a diagnosed physical and mental health problems respectively. Participants with history of physical illness in the last one month showed 2.36 times higher prevalence of mental distress compared to their counterparts. There was no association found between history of diagnosed mental health problems and mental distress. However, from the total participants who reported idea of ending owns life, 79.17% (n=19) were with diagnosed mental health problems.

5.6 Substance related factors

Among the study participants 14.4% (n=48) of them were found to have alcohol use disorder (CAGE≥2). Participants with alcohol use disorder were identified to have 2.63 times higher prevalence of mental distress than their counterparts (50%, n=24). Current khat users and current tobacco smokers were similarly developed 2.22 times (44.0%, n=37) and 3.54 times (57.6%, n=19) higher prevalence of mental distress than non-users (See table.4).

Table 4: Bivariate logistic regration: Association of substance related factors with mental distress among health professionals working in JUTH, December 2013 (n=334)

Variables		Mental distress		COR(95%CI)	p-value
		Yes	No		
		No (%)	No (%)		
Alcohol use disorder	Yes	24(50.0)	24(50.0)	2.63(1.41, 4.91) *	0.001
	No	76(27.5)	200(72.5)	Ref.	
Ever use of alcohol	Yes	57(42.2)	78(57.8)	2.52(1.55, 4.10) *	0.001
	No	42(22.5)	145(77.5)	Ref.	
Current use of khat	Yes	37(44.0)	47(56.0)	2.22(1.33, 3.73) *	0.001
	No	63(26.1)	178(73.9)	Ref.	
Ever use of khat	Yes	48(42.1)	66(57.9)	2.22(1.37, 3.62) *	0.001
	No	52(24.6)	159(75.4)	Ref.	
Current tobacco smoking	Yes	19(57.6)	14(42.4)	3.54(1.69, 7.38) *	0.001
	No	81(27.7)	211(72.3)	Ref.	
Ever tobacco smoking	Yes	22(55.0)	18(45.0)	3.24(1.65, 6.37) *	0.001
	No	78(27.4)	207(72.6)	Ref.	
Current use of hashish	Yes	7(38.9)	11(61.1)	1.46(0.55, 3.90)	0.450
	No	93(30.3)	214(69.7)	Ref.	
Ever use of hashish	Yes	14(50.0)	14(50.0)	2.50(0.19, 0.89) *	0.024
	No	86(29.0)	211(71.0)	Ref.	

Keys. (*) significantly associated

After adjusting for potential confounders, using binary logistic regression analysis in which enter method (default) employed, it was found that poor prospect of promotion (AOR=2.08, 95% CI=1.05-4.09), physical and verbal abuse (AOR= 2.34, 95% CI=1.23-2.37) and high score of burnout (AOR=4.47, 95%CI=2.37-8.44) were significantly associated with mental distress. The likelihood of developing mental distress among participants with high burnout score was 4.47 times more than participate with low burnout (AOR=4.47, 95%CI=2.37-8.44) in the final model. Additionally, the likelihood of developing mental distress among physically and verbally abused staffs was 2.34 times higher than their counterparts, also mental distress was more than two times higher among health professionals reported poor prospect of promotion than those who reported good prospect of promotion.

Table 5: Multivariate logistic regression: Variables identified to have stastically significant associations with mental distress among health professionals working in JUTH, December, 2013 (n=334)

Variables		Mental distress		Multiple logistic regression	
		Yes No (%)	No No (%)	AOR(95%CI)	p-value
Prospect of Promotion	Good	33(21.4)	121(78.6)	Ref.	
	Poor	63(37.7)	104(62.3)	2.08(1.05, 4.09)	0.035
Physical/Verbal violence	Yes	61(42.7)	82(57.3)	2.37(1.23, 4.54)	0.010
	No	38(21.1)	142(78.9)	Ref.	
Level of burnout	High	58(51.8)	54(48.2)	4.47(2.37, 8.44)	<0.001
	Low	41(19.6)	168(80.4)	Ref.	

Chapter Six: Discussion

In this study nearly one-third (29.9%) of the study participants were identified to have mental distress which was similar with a study done in Jimma town, Ethiopia which found 25.8% prevalence of mental distress among community [32]. Also, it was similar with a study finding from Jimma prison, Ethiopia which found 35.9% prevalence of mental distress among homicide offenders and suspects [33].

Overall 29.9% prevalence of mental distress among health professionals from our study finding was found to be lower compared to similar study done in United Kingdom among health professionals, which showed 52.3% of mental distress [42]. On the contrarily, it was found to be higher than similar study finding in Greece (20.7%) [17]. Also, it was higher than the study finding from Addis Ababa, Ethiopia which found 17.7% prevalence of mental distress among teachers and employees of commercial bank of Ethiopia [31]. The observed difference between our study finding and the studies above could be due to the gap in socio-demographic and socio-economic status among participants, difference in culture and difference in the nature of the work. Similarly difference in the cut-off point with SRQ-20 items may explain the differences.

In this study, prevalence of mental distress among nurses was 31% which was consistent with a study done in Nepal 34.7% [29]. Also, it was in agreement with similar study finding from Australia (35.6%) [40]. Prevalence of mental distress among physicians was 27% which was consistent with similar study done in Greece (25.6%) [17]. Also, it was consistent with the study finding from Australia which found prevalence of mental distress among physician to be 28% [30]; and it was consistent with study finding from Netherland which found 29% of mental distress among physicians [34].

However, the prevalence of mental distress among nurse in this study (31%) was higher than Greece study finding (23.9%) [17]. But it was lower than study finding from German which found 41.3% of mental distress among nurses [41]. Also, it was less than Australian and Iran study findings (37.3% and 45.4% respectively) [40, 44].

Prevalence of mental distress among physicians (27%) found in this study was higher than study finding that was done in Greece (21.7%) [17]; similarly, it was slightly higher than the study

finding from Brazil which found 24% mental distress among physician [28]. But it was lower than study finding that was done in Iran (43.9%) [38].

The possible explanation for the gap observed between our study and the two studies from Iran might be due to the studies among physicians and among nurses were conducted independently with the tool GHQ-28. Relatively lower prevalence of mental distress among nurses and physicians was observed from our study finding compared with above studies. It could be due to methodology and tools difference (Most of them were used GHQ-28 item). The other difference could be due to difference in culture and socio-demographic factors between our study population and the above study population but it needs further research. Additional sources of stressor may exist among health professionals in economically advanced nations; for instance issues regarding health care insurance and holistic care given for every each patient which is much practical in economically developed nations may probably increase much stressor among health professionals.

In our study prevalence of mental distress among women participants was 31.8%; which was consistent with similar study finding that was done in Queensland, Australia (29%) [30]. However it was lower compared with study finding in Iran (50.0%) among women participants [38]. Contrarily, it was higher compared with a study finding in Addis Ababa, Ethiopia (25.9%) among women [31]. The difference could be explained by difference in study method, difference in the nature of work, difference in tools used and difference in socio-demographic factors.

The current study showed similar prevalence of mental distress among both sexes (31.8% among women and 29.4% among men). Meanwhile some studies showed higher prevalence of mental distress among women than men. For instance, a study finding from Iran showed 50% and 38.5% prevalence of mental distress among women and men study groups respectively [38]. Similarly a study result from Addis Ababa, Ethiopia found higher prevalence of mental distress among women than men (25.9% vs.12.4%) [31]

The observed gap from study result in Iran with our finding could be explained by difference in socio-demographic factors, socio-economic status and difference in culture. The difference between our study finding and the study in Addis Ababa could be explained by difference in profession and study method. Because, the study from Addis Ababa used a multistage

probabilistic stratified sampling technique. The other reason might be difference in the level of education among the two study participants. Majority of our study participants were first degree holders (52%, n=172), and no participant found below college diploma. However, the study from Addis Ababa included 29% (n=637) participants below college diploma. And working in large city like in Addis Ababa could be more stressful due to hardship to get a transportation could be much tougher especially for ladies than working in towns which is the work place is nearer for the staffs relatively.

Higher prevalence of mental distress (38%) was observed among young participants (20 to 24 years) and no significant association found between age and mental distress. It was in agreement with the study done from Addis Ababa which found higher prevalence (35.5% in women and 16.7% in men) among participants with similar age group (≤24yrs) [31]. However it was in contrast with study finding that was done in Australian which found higher prevalence (42%) among late adulthood participants (35 to 49 years) and significant association between age in years and mental distress [30]. Possible justification for the difference could be expectation for medical profession and the actual work practice might not be inline in our study area. As a result newly graduated health professionals could face difficulties and stressful conditions beyond their expectations at their earlier professional carrier period. The other difference could be due to difference in mean age between the two study participants. Mean age of our study participants was 28±7.65; whereas 90% of study participants in Australian study were ≥ 35 year. This possibly implies socio-demographic differences exist between the two study populations. Additional explanation could be due to difference in data collection technique which they were used postal data collection technique which lowered their response rate to 60%.

Our study showed higher prevalence of mental distress among staffs working in wards (37.0%, n=54) and at intensive care unit (33.3%, n=6). It was in agreement with the study done in England which showed higher mental distress among nurses who were working at waiting rooms and intensive care units [23].

A similar study finding in United Kingdom found significant associations by lack of support from managers (OR=3.00, 95%CI=1.42-6.34) and by job insecurity (AOR=3.82, 95%CI=1.17-12.46) [42]. Another similar study in Brazil found, high support at work place as protective factor from mental distress by 60% (AOR=0.60, 95%CI=0.3-1.00) [28].

Our study finding was inconsistent with the above two studies, which didn't found significant association of above variables with mental distress. The difference between the two study findings could be explained by difference in methodology (cross-sectional vs. case-control), difference in socio-demography and socio-economy between the two study participants may explain the difference between the two studies.

Poor prospect of promotion was found to be independent predictor of mental distress. Participants claimed poor prospect of promotion were 2.08 times more likely to have mental distress compared with participants reported good prospect of promotion (P-value=0.035, 95%CI=1.05-4.09). It was in agreement with study finding in United Kingdom which found a significant association between poor prospect of promotion and mental distress (AOR=3.44, 95%CI=1.33-8.80) [42].

The current study found physical or verbal abuse to be independent predictor of mental distress (AOR=2.37, 95%CI=1.23-4.54). Those participants encountered physical or verbal abuse were 2.37 times more likely at risk to have mental distress than their counterparts. It was consistent with a study done in Australian which found that, as score of work place violence decreased the chance of having mental distress was proportionally decreased [*p=0.049, 95%CI=(-4.58 to -0.98)*] among hospital nurses [40]. It was also in line with similar study in German among nurses found aggressive and depressive behavior of patients significantly associated with mental distress. Nurses' who frequently faced challenging behavior by their patients were exposed for lower quality of general health and workability as well [41].

According to our result participants who identified to have high score of burnout (above the mean score of 43.39±1.91) were 4.4 times more likely to have mental distress compared with their counterparts (AOR=4.40, 95%CI=2.66-7.29). It was consistent with the study done in German which found burnout as independent predictor of mental distress (p=0.009) [41]. Similarly, it was also consistent with the study done in Netherland which identified burnout (AOR=9.5, 95%CI=3.0-30.6) as significantly associated with mental distress [34].

According to our study result, participants with history of physical health problems in the last one month were having higher prevalence of mental distress (46.2%, n=30) than their counterparts (26.6%, n=69). It was in agreement with similar study conducted in university of Miami, USA which found higher prevalence of mental distress among participants with arthritis

(19.4%) than participants without arthritis (13.6%) [45]. It was also congruent with a cross-sectional survey among registered nurses in Boston area hospital, USA which showed that, those with musculoskeletal pain disorder were having a significantly higher level of mental distress than those without pain disorder [46].

A case-control study in United Kingdom found, a statically significant association between history of psychiatric disorders with mental distress (p=0.019) [42]. It was not in agreement with our study finding which identified as there is no significant association between history of diagnosed mental health problems and mental distress. The contrast could be due to difference in study design (case-control vs. cross-sectional), due to time-line gap between the two study periods. Additionally our study participants may not report past psychiatric history due to fear of stigma which may potentially affect their social life.

From our study result higher prevalence of mental distress among participants with alcohol use disorder (50.0%, n=24) compared with their peers without alcohol use disorder (27.5%, n=76). In addition our finding revealed 57.6% (n=19) and 27.7% (n=81) prevalence of mental distress among current tobacco smokers and non-smokers in the last 12 months respectively. Similarly prevalence of mental distress was higher among current khat users than non-users of khat in the last 12 months. However, no significant association found between mental distress and with the above variables at multivariate logistic regression.

It was congruent with similar study done in Thailand, which found, 1.20-1.35 times higher prevalence of mental distress among regular alcohol drinker health professionals than non-drinkers. It was also showed, 1.29-1.41 times higher prevalence of mental distress among regular tobacco smokers than their counterparts [47].

Our finding was also consistent with the study done in Addis Ababa among employees of private and commercial bank of Ethiopia, identified higher prevalence of mental distress among heavy alcohol drinkers than non-drinkers [31].

From our finding (44% vs. 26% prevalence among khat users and among non-users respectively) was more of consistent with a community based cross-sectional study done in Jimma town which reported 34.7% khat users were mentally distressed than non-users (20.5%) [32].

The difference in magnitude of mental distress among khat users (44% vs. 35%) between the two studies, possibly explained by health professionals could have better income to buy khat as compared with the general population whom may be vulnerable for khat induced mental distress. And it may be due to difference in methodology (multistage sampling technique used by the above study).

It was also congruent with a study done in Jimma, Ethiopia which identified that frequently khat chewers were having higher prevalence of anxiety disorders (33.3% vs.15.7%), and higher prevalence of depressed mood (16.7% vs. 43.8%) compared with rarely khat users.

Some important limitations must be considered when utilized our study results. This study didn't assess use of benzodiazepines and oppoid drugs like pethidine which potentially used because of its access for health professionals. Additionally 83% response rate was not as it was expected. The other limitation of our study was, it used non-standardized questions for some of work related variables because of not to make respondents bored with much questions. The findings of this study doesn't represent health professionals who are working both as lecturer of Jimma university and clinician in JUTH at the same time.

Chapter Seven: Conclusion and Recommendation

7.1 Conclusion

A relatively high prevalence of mental distress was observed among health professionals. Mental distress was statically, significantly associated with poor prospect of promotion, physical and verbal abuse and with high burnout score. Prevalence of mental distress was higher among health professionals with history of physical health problems; however no difference in prevalence of mental distress found among participants with or without history of mental health problems. Most of the participants who had history mental health problems reported suicidal idea.

7.2 Recommendation

We recommend to JUTH health professional staffs to deal with individual based interventions to minimize any kind of physical and verbal abuse against them through smooth and brotherhood communications and understanding. We consider interventions stress management program strategies to minimize high burnout and mental distress among health professionals. Mindfulness based stress reduction training need to be implemented for 8-12 weeks, with at least one session in a week, for 2-3 hours.

We recommend to the administrative staffs of JUTH to ensure safety of health professionals through preventing them from any kind of verbal and physical violence by designing and implementing rules and regulations as well as by strengthening security forces. We also recommended to administrative personnel's of JUTH to reward their staffs with appropriate promotions in terms of position and educational opportunity.

Jimma University shall to promote researchers focus in the area to conduct future studies among health professionals.

Finally we recommend for policy makers and responsible higher officials at the regional and federal health offices to design policies, strategies and plans to improve mental wellbeing of health care professionals.

REFERENCES

1. World health organization. Mental Health Policy and Service Provision. Geneva, Switzerland 2001; 1-169

2. Orpana HM, Lemyre L, and Gravel R. The role of the social environment. Spastics Canada Health Reports, 2009; 20(1): 1-7

3. British Occupational Health Research Foundation. Work place interventions for people with common mental health problems. BOHRF report, September 2005

4. United Nations High Commissioner for Refugees. Assessing Mental Health and Psychosocial Needs Dollo Ado Refugee Statistics Weekly Report, January 10, 2013. Accessed *http://data.unhcr.org/horn-of-africa/country.php?id=65#tabs-2*

5. Carney RM, and Freedland KE. Psychological Distress as a Risk Factor for Stroke-Related Mortality. Journal of the American heart association, 2002; 33:5-6

6. Boyce CJ, and Wood AM. The Cost of Alleviating Psychological Distress with Monetary Compensation versus Psychological Therapy: Health Economics, Policy and Law. Accessed on date July 21/2013 at 12:30 pm. *http://journals.cambridge.org/action/login*

7. World Federation for Mental Health. Mental Health and Chronic Physical Illnesses, October 10, 2010. Accessed on August 15, 2013 at 11am. Available at *wfmh.com/wp-content/uploads/2014/02/wmhday2010.pdf*

8. Medibank Private and Workplace Health. The Cost of Workplace Stress in Australia, August 2008. Browsed on August 15, 2013 at 11am at *http://www.madibank.com.au/client/pdfs/The-cost-of-workplace-stress.pdf*

9. World Health Organization and International Labour Organization. Mental Health and Work-impact, issues and good practices. Geneva, Switzerland, 2002

10. Bolder N, Bar-Dayan Y, Rosenbloom T, et al. Optimism of health care workers during a disaster. Emergency Health Threats Journal, 2012; 5: 7270

11. Guthrie E, and Black D. Psychiatric Disorder, Stress and Burn-out. Advances in Psychiatric Treatment, 1997; 3: 275-281

12. World health organization. Investing in mental health. Geneva, Switzerland, WHO report, 2013; Accessed at website: *www.who.int/mental_health.*

13. Drapeau A, Marchand A, and Prévost DB. Epidemiology of Psychological Distress, January, 2012; 106-133

14. Moustaka E, and Antinidis TC. Sources and effects of Work-related stress in nursing. Health Science Journal, 2010; 4(4)

15. International labour organization. Mental health in work place. Geneva, Switzerland, 2000

16. Australian government safety and compensation council. Work-Related Mental disorders in Australia, April 2006. Accessed on October 8, 2013 at 3pm. Available at *www.safeworkaustralia.gov.au/.../Workrelated_Mental*

17. Goulia P, Mantas C, Dimitroula D, et al. General hospital staff worries, perceived sufficiency of information and associated psychological distress during the A/H1N1 influenza pandemic. BMC Infectious Diseases, 2010; 10:322

18. Blewett V, Shaw A, Anthony D, et al. Job Stress, Causes, Impacts and Interventions in the Health and Community Services Sector, 2006

19. Rebecca M. Stress in work place a costly epidemic. Fairleigh Dickinson University News letter FDU web page. Accessed at *http://www.fdu.edu/newspubs/magazine/99su/stress.html* on January 25th, 2014

20. Ronda G. Nurses at the "Sharp End", Patient Safety and Quality. An Evidence-Based Handbook for Nurses, 1: 1-25

21. Christel A, Woodward, Cunningham C, et al. Predictors of psychological distress in work place a longitudinal study. CHEPA Working Paper Series, June, 1999; 99-104

22. Crabbe JM, Bowley DMG, Boffard KD, et al. Are health professionals getting caught in the crossfire? The personal implications of caring for trauma victims. Emerg Med J 2004; 21:568–572

23. Gillespie M, and Melby V. Burnout among nursing staff in accident and emergency and acute medicine, a comparative study. Journal of Clinical Nursing, 2003; 12: 842–851

24. Tei-Tominaga M. Factors related to the intention to leave and the decision to resign among newly graduated nurses. Environ Health Prev Med, November 6, 2012

25. Saha D, Sinha R, and Bhavsar K. Understanding Job Stress among Healthcare Staff. Online J Health Allied Scs. April 15, 2011; 10(1):6

26. Zainal A, Razak A, Yeopyunus Nk, et al. The impact of work overloads and Job involvement on work-family conflict among Malaysian doctors. Labuane-Journal of Muamalat and Society, 2011; 5:1-10

27. Pietersen C. Job satisfaction of Hospital Nursing Staff. SA Journal of Human Resource Management, 2005; 3 (2): 19-25

28. Assuncao AA, Machado CJ, Prais HAC, et al. Working conditions and common mental disorders in physicians in Brazil. Occupational Medicine, 2013; 63:234–237

29. Shakyaet, Lama S, and Shyangwa. psychological problems among nursing staff of a tertiary-care hospital in eastern Nepal. J Nepal Med assoc, 2012; 52(187):102-10

30. Holt J, and Del Mar C. psychological distress among GPs. Australia Family Physicians, 2005; 34(7):599

31. Gelaye B, Lemma S, Deyassa N, et al. Prevalence and Correlates of Mental Distress among Working Adults in Ethiopia. Clinical Practice & Epidemiology in Mental Health, 2012; 8:126-133

32. Damena T, Mossie A, and Tesfaye M. Khat Chewing and Mental. A community based study in Jimma city, Southwestern Ethiopia. Ethiop J Health Sci. March 2011; 21(1):37-45

33. Audu MD, Tesfaye M, Gurmu S, et al. Lifetime prevalence of substance abuse and mental distress among homicide offenders

34. Ruitenburg M, Dresen F, Sluiter S, et al. The prevalence of common mental disorders among hospital physicians and their association with self-reported work ability. BMC Health Services Research, 2012; 12:292

35. Atindanbila S, Abasimi E, and Anim MT. Work Related Depression, Anxiety and Stress of Nurses at Pantang Hospital, Ghana. Research on Humanities and Social Sciences, 2012; 2(9):1-8

36. Hussein J, Aniza I, and Taufik JA. Factors associated with organizational stress among intensive care unit health care workers, in Somalia Hospital. Malaysian Journal of Public Health Medicine, 2012; 12(1): 57-66

37. Ansoleaga E, Toro C, Godoy C, et al. Psycho physiological distress among health care professionals working in Chilean public hospitals. Articulos de investigacion, Rev Med Chile 2011; 139: 1185-1191

38. Assadi SM, Nakhaei MR, Najafi F, et al. Mental health in three generations of Iranian medical students and doctors. Soc Psychiatry PsychiatrEpidemiol, November 1, 2006; 42:57–60

39. Gareis KC, and Barnett RC. Under what conditions do long work hours affect psychological distress. Work and occupations, November 2002; 29(4): 483-49

40. Rodwell J, and Demir D. Psychological consequences of bullying hospital and aged care nurses. Accessed at *http://onlinelibrary.wiley.com/doi/10.1111/j.1466-7657.2012.01018.x/pdf* on June 18/2013 at 6:30 pm

41. Schmidt SG, Dichter MN, Palm R, et al. Distress experienced by nurses in response to the challenging behavior of residents evidence from German nursing homes. Journal of Clinical Nursing, September 8, 2012; 21: 3134–3142

42. Weinberg A, and Creed F. Stress and psychiatric disorder in healthcare professionals and hospital staff. The lancet, February 12, 2000; 355: 533–37

43. Mei Bai Ya, Chao-Cheng Lin, Chih-Yuan Lin, et al. Survey of Stress Reactions among Health Care Workers Involved With the SARS Outbreak. Psychiatric services, September 2004; 55 (9):1055-1057

44. Ardekani Z, Kakooei H, Ayattollahi SMT, et al. prevalence of mental disorders among shift work Hospital Nurses in Shiraz, Iran. Pakistan journal of Biological sciences, 2008; 11(12):1605-1609

45. Martinez AJ. Psychological Distress, Alcohol Abuse and Smoking among Adults with Arthritis. National Hispanic Science Network, International Conference, 2009

46. Reme SE, Jack T, Hashimoto D, et al. Musculoskeletal Pain and Psychological Distress in Hospital Patient Care Workers. J Occup Rehabil, March 31, 2012

47. Yiengprugsawan V, Harley D, Seubsman S, et al. Physical and mental health among caregivers. BMC Public Health, 2012; 12:1111

48. Gorfu M. The Prevalence of Khat –Induced Psychotic Reactions among College Students: A Case in Jimma University College of Agriculture. Ethiop. J. Educ. & Sc., September 2006; 2(1):71-84

49. World health organization division of mental health. User's Guideline to the Self Reporting Questionnaire. World Health Organization Geneva, 1994

51. Kortmann F. Problems in practicing psychiatry in Ethiopia. EthiopMed J 1988; 26(2): 77-84

52. Peter J, and Knut F. Comparative Validity of Screening Instruments for Mental Distress in Zambia. Clinical Practice & Epidemiology in Mental Health, 2010; 6:4-15

53. Borritz M, and Kristensen TS. Copenhagen Burnout Inventory. First edition, February 2004

54. Pejtersen JH, Kristensen TS, Borg V, et al. Second version of the Copenhagen Psychosocial Questionnaire. Scandinavian Journal of Public Health, 2010; 38(3): 8–24

55. Ruiz EM, Gomez-Quintero HB, and Lluis SM. Validation of the Copenhagen Burnout Inventoryto Assess Professional Burnout in Spain. Rev Esp Salud Public 2013; 87:165-179

56. Campos JA, Carlotto MS, and Maroco J. Copenhagen Burnout Inventory Validation. Reflexao Critica, 2013; 26(1): 87-97

57.Smit AM. Psychometric properties of the Copenhagens Burnout Inventory in South African context. University of Pretoria, September, 20

Annex I. English version of the Questionnaire

Questionnaire prepared by Jimma University, college of public health and medical science, department of psychiatry, Integrated clinical and community mental health year II student, will be filled by JUTH health professionals.

Dear participants!

To conduct an intervention in mental health services to the individual level, knowing the magnitude and breadth of the problem is very crucial. In this study; it is proposed to assess the prevalence and factors which contribute for mental distress at JUTH health professional staffs. The result of this study will help the hospital stake holders, in identifying as well as to set plans and conduct intervention measures in resolving work related risk factors exposed for mental distress. It also enhances the wellbeing of the overall staffs, and thereby contributes for the goal of producing skilled man powers. So you are kindly requested to complete this questionnaire. There is no need of writing your name on the format and we would like to reassure you that the information you are going to provide will be kept confidential. It is your right to participate or refuse in this study. If you do not want to participate in the study, you can return the format to the data collector by encircling "NO". But your honest participation will have contribution to generate valid information. If you need clarification please don't hesitate to ask the data collectors for clarification.

Thank you!

Do you want to be included in the study?   1. Yes   2. No

1. Questions related with socio-demographic characteristics

After reading the following questions, please give appropriate answer by encircling your number of choice or write on the space provided.

    101. Age in year …………………

    102. Sex   1. Male

                    2. Female

    103. What is your religion?

        1. Orthodox

        2. Islam

        3. Protestant

        4. Catholic

        5. No religion

        6. Others specify………………

    104. What is your ethnicity?

        1. Oromo

        2. Amhara

        3. Tigre

        4. Wolayta

        5. Harari

        6. Somali

        7. Gurage

        8. If not listed, specify………………

    105. What is your marital status currently?

        1. Single

        2. Married

        3. Divorced

        4. Widowed

        5. In relationship (Has boy/girlfriend)

        6. If not listed, specify ………

    106. What is your monthly salary in Birr? …………..

    107. What is your total monthly income? …………

    108. Do you have children   1. Yes   2. No

        If you say YES how many children do you have? …………

    109. What is your profession?

1. Physician

2. Nurse/ nurse professional

3. Druggist/Pharmacist

4. Laboratory technician/technologist

5. Radiology technician/technologist

6. Physiotherapist

7. Anesthetist

8. Optometrist

9. Sanitarian

10. If not listed specify……..

110. Academic status

1. Diploma

2. Degree

3. Masters

4. General Practitioner,

5. Specialist

111. How many year of working experience you have in this institution? ……….

2. The Self-Reporting Questionnaire (SRQ-20)

The following questions are related to certain pains and problems that may have bothered you in the last 30 days**.** If you think you had the described problem in the last 30 days, encircle "YES" (make right sign at YES). On the other hand, if you did not have the problem in the last 30 days**,** encircle "NO" (make right sign at NO).

Q. No	Encountered health problems within the last 4 weeks	YES	NO
201	Do you often have headaches?	1	0
202	Is your appetite poor?	1	0
203	Do you sleep badly?	1	0
204	Are you easily frightened?	1	0
205	Do your hands shake?	1	0
206	Do you feel nervous, tense or worried?	1	0
207	Is your digestion poor?	1	0
208	Do you have trouble thinking clearly?	1	0
209	Do you feel unhappy?	1	0
210	Do you cry more than usual?	1	0

211	Do you find it difficult to enjoy your daily activities?	1	0
212	Do you find it difficult to make decisions?	1	0
213	Is your daily work suffering?	1	0
214	Are you unable to play a useful part in life?	1	0
215	Have you lost interest in things?	1	0
216	Do you feel that you are a worthless person?	1	0
217	Has the thought of ending your life been on your mind?	1	0
218	Do you feel tired all the time?	1	0
219	Do you have uncomfortable feelings in your stomach?	1	0
220	Are you easily tired?	1	0

NOTE: If you answered "YES" for question N<u>O</u> 217, you are advised to contact the supervisor or the data collector as soon as possible in person.

3. Work Related Questions

The questions below ask about work related issues in JUTH. So after you read each question, please encircle, or make a right (√) or (×) mark in front of the appropriate answer for you for each question.

301. At which department you have been working in the last one month?

1. OPD

2. Inpatient/ward

3. OR

4. ICU

5. Laboratory department

6. Pharmacy department

7. Radiology department

8. List if not listed……

302. There is shortage of essential resources for patient care in my working unit.

1. Always

2. Often

3. Sometimes

4. Rarely

5. Never

303. I have a fear of getting an illness from work place.

1. Always

2. Often

3. Sometimes

4. Rarely

5. Never

304. I have fear of insecurity for my job.

    1. Always

    2. Often

    3. Sometimes

    4. Rarely

    5. Never

305. I have been encountered verbal or physical abuse by patients, patient families, work mates or bosses in the last one month.

    1. Always

    2. Often

    3. Sometimes

    4. Rarely

    5. Never

The following questions below from the three tables are continued from the above questions which similarly ask about work related conditions. So you are kindly asked to encircle or put either "√" or "X" mark on the right answer for you for each question.

Table 3.1

Q. N**o**	Questions	YES	NO
306	Do you know your professional role at work?	1	0
307	Did you encounter a diagnosed physical illness in the last one month?	1	0
308	Did you have a history of diagnosed mental illness that affects your work?	1	0
309	Do you have pare time work/school?	1	0
310	Have you been working in the night shift most of the time in the last one month?	1	0
311	Was your profession your choice from the beginning?	1	0
312	Did you do medical faults/errors in the last one month during work?	1	0

Table 3.2

Q. N<u>o</u>	Questions	Very good	Good	Not good	Very bad
313	How can you describe the support you are getting from workmates?	0	1	2	3
314	How can you describe the support you are getting from bosses?	0	1	2	3
315	How can you describe the support you are getting from managers?	0	1	2	3
316	How can you describe your relationship with workmates?	0	1	2	3
317	How can you describe your relationship with your immediate boss?	0	1	2	3
318	How can you describe your relationship with the hospital managers?	0	1	2	3
319	How can you describe management system of the hospital?	0	1	2	3

Table 3.3

Q. N<u>o</u>	Questions	Strongly agree	Agree	Disagree	Strongly disagree
320	There is work loud.	0	1	2	3
321	Promotion is provided according to my work efficiency and my academic status.	0	1	2	3
322	The physical working environment is convenient/suitable.	0	1	2	3
323	Professional recognition is considered in this organization at all levels of academic status	0	1	2	3
324	My monthly salary is appropriate according to work	0	1	2	3

4. Questions to Assess Burnout

Questions below ask about manifestations of burnout. After you read each question from the two tables below, please encircle or make a right (√) or (×) mark in front of each question.

Table 4.1

N<u>o</u>	Questions	Always	Often	sometimes	Seldom	Never
401	Do you feel worn out at the end of the working day?	100	75	50	25	0
402	Are you exhausted in the morning at the thought of another day at work?	100	75	50	25	0
403	Do you feel that every working hour is tiring for you?	100	75	50	25	0

404	Don't you have enough energy for family and friends during leisure time?	100	75	50	25	0
405	How often do you feel tired?	100	75	50	25	0
406	How often are you getting physically exhausted?	100	75	50	25	0
407	How often are you getting emotionally exhausted?	100	75	50	25	0
408	How often do you think"I can't take it anymore"?	100	75	50	25	0
409	How often do you feel worn out?	100	75	50	25	0
410	How often do you feel weak and susceptible to illness?	100	75	50	25	0

Table 4.2

No	Continued questions	very high degree	high degree	Somewhat	low degree	Very low degree
411	Does your work frustrate you?	100	75	50	25	0
412	Do you feel burnt out because of your work?	100	75	50	25	0
413	Is your work emotionally exhausting?	100	75	50	25	0
414	Do you find it hard to work with patients?	100	75	50	25	0
415	Do you find it frustrating to work with patients?	100	75	50	25	0
416	Does it drain your energy to work with patients?	100	75	50	25	0
417	Do you feel that you give more than you get back when you work with patients?	100	75	50	25	0
418	Are you tired of working with patients?	100	75	50	25	0
419	Do you sometimes wonder how long you will be able to continue working with patients?	100	75	50	25	0

5. Questions to Assess Substance Use

5.1 The following three questions are specific to Khat chewing Practices in particular. If your answer is YES encircle it and if your answer is NO encircle it.

501	Have you ever used khat in your life time?	Yes	No
502	Have you used Khat in the last 12 months?	Yes	No
503	What was your reason(s) to use khat?		
	1.To increase work performance	Yes	No
	2.To get relief from tension	Yes	No
	3.To combat against exhaustion and hunger	Yes	No

	4.Due to work dissatisfaction	Yes	No
	5.Due to religious practices	Yes	No
	6.To get acceptance from others / to be like others/	Yes	No
	7.To be sociable	Yes	No
	8.To get personal pleasure	Yes	No
	9.To increase pleasure during sexual intercourse	Yes	No
	10.specify if not listed or additional reason_____		

5.2. The following three questions are specific to Alcohol drinking habits

504	Have you ever used alcohol drinks (Areke, Tela,Tej, beer, and other alcohol drinks) in your life?	Yes	No
505	Have you used any kind of alcohol drinks in the last 12 months?	Yes	No
506	if you use alcohol ;		
	1. Have you felt the need to cut-down on your drinking?	Yes	No
	2. Have you felt annoyed by criticism of your drinking?	Yes	No
	3. Have you felt guilty about your drinking?	Yes	No
	4. Have you felt the need for an eye-opener in the morning?	Yes	No

5.3. The following three questions are specific to cigarette and other Tobacco products use

507	Have you ever used Tobacco products such as cigarette, wrapped tobacco leaf Pipa and chewable tobacco products (by smoking, chewing, sniffing)?	Yes	No
508	Have you used any kind of tobacco product in the last 12 months? (By smoking, sniffing)?	Yes	No
509	What was your reason(s) to use tobacco products?		
a)	To increase work performance	Yes	No
b)	To get relief from tension	Yes	No
c)	To combat against exhaustion and hunger	Yes	No
d)	Due to work dissatisfaction	Yes	No
e)	To get acceptance from others / to be like others/	Yes	No
f)	To be sociable	Yes	No
g)	To get personal pleasure	Yes	No
h)	To increase pleasure during sexual intercourse	Yes	No
i)	specify_____		

5.4. The following three questions are specific to Substances such as Hashish and Hashish like substances

510	Have you ever used in your life time substances such as hashish, Pat, Kaya, Joyint, Hait, Cannabis, Ganja, and or Heroin and others?	Yes	No
511	Have you ever used in the last 12 months / Such as hashish, Pat, Kaya, Joyint, Hait, Cannabis, Ganja, and or Heroin and others?	Yes	No
512	What was your reason(s) to use the above substances?		
a)	To increase work performance	Yes	No
b)	To get relief from tension	Yes	No
c)	To combat against exhaustion and hunger	Yes	No
d)	Due to work dissatisfaction	Yes	No
e)	To get acceptance from others / to be like others/	Yes	No
f)	To be sociable	Yes	No
g)	To get personal pleasure	Yes	No
h)	To increase pleasure during sexual intercourse	Yes	No
i)	specify_____		

Annex II. Amharic version of the Questionnaire

መጠይቅ: የአማርኛው ትርጉም

ጅማ ዩኒቨርሲቲ የህ/ብ ጤናና ህክምና ሳይንሶች ኮሊጅ የአእምሮ ህክምና ትምህርት ክፍል በአእምሮ ጤና 2ኛ ዓመት ተማሪ የተዘጋጀና በጅማ ዩኒቨርሲቲ ስፔሻያላይዝድ ሆስፒታል ቆሚ ቅትር የህክምና ባለሙያዎች የሚሞላ ጥናታዊ መጠይቅ

ዉድ የጥናቱ ተሳታፊዎች

የአእምሮ ጤና አገልግሎትን እስከ ግለሰብ ደረጃ ለማውረድ እቅዶችን ከመንደፍ አስቀድሞ የችግሩን ስርጭት፣ ክብደትና አሳሳቢነት ደረጃ ማዎቅ የግድ ይላል፡፡በመሆኑም የጅማ ዩ/ስ/ል ጤና ባለሙያዎች መካከል ምን ያህል የአእምሮ መረበሽ ችግር አለ? ለችግሩ መፈጠር ምክንያቶቹስ ምንድን ናቸው? የሚሉትን ጥያቄ ለመመለስና አስፈላጊዉን የመፍትሄ እርምጃዎች ለመዉሰድ ጥናታዊ ጽሐፎችን ማካሄድ አስፈላጊ መሆኑ ታምኖበታል፡፡ በዚህ ጥናታዊ ጽሐፍ የሚገኘው መረጃም የሆስፒታሉ ባለድርሻ አካላት ችግሩን ተረድተው ጤናማ የህክምና ባለሙያ ከመፍጠር አንፃር ተገቢውን የመፍትሔ እርምጃዎች እንዲወስዱ የሚረዳ ይሆናል፡፡ስለሆነም በዚህ ጥናታዊ ጽሁፍ ትሳተፉ ዘንድ በትህትና እንጠይቃለን፡፡

ለምትሰጡት መረጃ ሚስጥሩ የተጠበቀ መሆኑን እና መጠይቁ ላይ ስም መጻፍ የማያስፈልግ መሆኑን አውቃችሁ ልባዊ መረጃ ትሰጡን ዘንድ አስቀድመን በአክብሮት እንጠይቃለን፡፡ ያለመሳተፍ መብታችሁ የተጠበቀ ይሆናል፡፡ በማንኛውም ጊዜ ለሚያጋጥማችሁ ጥያቄዎችና ግራ ላጋባችሁ ጥያቄ ሳያወላዉሉ መረጃ ሰብሳቢዎችንም ሆነ የጥናቱን ባለቤት ከመጠየ አይገደቡ፡፡ በጥናቱ መሳተፍ ካልፈለጋችሁ መጠያቅ አለመቀበልም ሆነ "አልፈልግም" የሚለውን አማራጭ በማክበብ መጠይቁን መመለስ ይኖርባችኋል፡፡

እናመሰግናለን፡፡

በጥናቱ መሳተፍ ፍላጎዎት ነው?　　　　1. አዎ　　　　2. አልፈልግም

ክፍል 1፡ አጠቃላይ መረጃ

የሚከተሉት ጥያቄዎች ስለርስዎ ማህበራዊና ኢኮኖሚያዊ ሁኔታ የሚጠይቁ ናቸው።። እያንዳንዱን ጥያቄ ካነበቡ በኋላ መልሱን በተሰጡት ክፍት ቦታዎች ይጻፉ። አማራጭ ላላቸው ጥያቄዎች ደግሞ መልሱን በማክበብ ይመልሱ።።

101. እድሜ ....

102. ጾታ

    1. ወንድ

    2. ሴት

103. ሃይማኖት

    1. ኦርቶዶክስ ክርስትያን

    2. ሙስሊም

    3. ፕሮቴስታንት

    4. ካቶሊክ

    5. ሃይማኖት የለኝም

    6. ሌላ ካለ ይገለጽ

104. ብሔር

    1. ኦሮሞ

    2. አማራ

    3. ትግሬ

    4. ወላይታ

    5. ሶማሊ

    6. ጉራጌ

    7. ሌላ ካለ ይገለጽ

105. የጋብቻ ሁኔታ

    1. ያላገባ

    2. ያገባ

    3. አግብቶ የፈታ

    4. ባል/ሚስት የሞተባት/በት

    5. የወንድ/የሴት እቁኙ ያላት/ ያለው

106. ወርሃዊ ደሞዝ በብር ....

107. አጠቃላይ ወርሃዊ ገቢ በብር ....

108. ልጅ አለዎት   1.አዎ   2.የለኝም

     ካለዎት ብዛት ....

109. የሙያ አይነት

          1. ሐኪም

          2. ነርስ/ነርስ ፕሮፌሽናል

          3. ድራጊስት/ፋርማሲስት

          4. ላብራቶሪ ቴክኒሽያን/ቴክኖሎጅስት

          5. ራዲዮሎጅ ቴክኒሽያን/ቴክኖሎጅስት

          6. ፊዚዮቴራፒስት

          7. አንስቴቲስት

          8. ኦፍታሜትሪስት

          9. ሳኒታሪ

          10. ሌላ ካለ ይግለፅ.................

110. የትምህርት ደረጃ

          1.ዲፕሎማ

          2.ዲግሪ

          3.ማስተርስ ዲግሪ

          4.አጠቃላይ ሐኪም

          5.ስፔሻሊስት

111. በጅማ ዩ/ስ/ሆ/ል ያለዎት የአገልግሎት የስራ ዘመን ብዛት በወር/በዓመት ....

ክፍል 2፡ የጤና እክል መመዘኛ ጥያቄዎች

የሚከተሉት ጥያቄዎች ባለፉት 30 ቀናት ዉስጥ አሳስቦሽ/ህ የነበሩ የህመም ስሜቶችን የሚመለከቱ ናቸዉ፡፡በእያንዳንዱ ጥያቄ ስር የተጠየቀው የህመም ስሜት ባለፉት 30 ቀናት ውስጥ ተሰምቶሽ/ህ ከነበረ (1)ን በማክበብ አመልክቺ/ት፡፡በሌላ በኩል ደግሞ የተጠየቀው የህመም ስሜት ካልነበረብሽ/ህ (2)ን በማክበብ ምረጭ/ጥ፡፡ለጥያቄው መልስ ለመስጠት ካለሆነልሽ/ህ የተሻለ ይቀርባል የምትይዉን/ለዉን አመልክቺ/ት፡፡

ተ.ቁ.	ባለፉት 30 ቀናት የደረሰ የጤና ችግር	አዎ	የለም
201	ራስ ምታት ብዙውን ጊዜ ያሞታል?	1	0

202	የምግብ ፍላጎትዎ ቀንሶብዎታል?	1	0
203	የእንቅልፍ ችግር አለብዎት?	1	0
204	በቀላሉ ፍርሃት ፍርሃት ይልዎታል?	1	0
205	እጅዎ ይንቀጠቀጣል?	1	0
206	የሐሳብ መረበሽ ወይም መጨነቅ ይበዛብዎታል?	1	0
207	ምግብ ከበሉ በኋላ የምግብ አለመፈጨት ችግር አለብዎት?	1	0
208	በትክክል ማሰብ ይቸግርዎታል?	1	0
209	ደስታ የማጣት ስሜት አለብዎት?	1	0
210	ያለበቂ ምክንያት ማልቀስ ማልቀስ ይልዎታል?	1	0
211	በየቀኑ በሚሰሩት ስራ መደሰት ይቸግርዎታል?	1	0
212	በየእለት ተእለት ተግባርዎ ዉሳኔ ላይ መድረስ ያስቸግርዎታል?	1	0
213	የእለት ተለት ተግባርዎን ለመፈፀም ስቃይ ሆኖብዎታል?	1	0
214	በአካባቢዎ ጠቃሚ ተሳትፎ ማድረግ ያስቸግርዎታል?	1	0
215	በሁሉም ነገር ላይ የነበርዎት ፍላጎት/ስሜት ጠፍቶዓል?	1	0
216	የማልጠቅም ሰዉ ነኝ ብለው ያስባሉ?	1	0
217	ህይወትዎ አስጠልቶዎት መቾ ባረፈኩ/ በሞትኩ ያለብት ግዜ አለ?	1	0
218	ሁልጊዜ ድካም ይሰማዎታል?	1	0
219	ሆድዎ ይረበሻል?	1	0
220	በቀላሉ ይደክምዎታል?	1	0

ማስታዎሻ፦ ለጥያቄ ተራ ቁጥር 217 መልስዎ "1" (አዎ) ከሆነ እባክዎ በአቅራቢያ ያገኙትን መረጃ ሰብሳቢም ሆነ የጥናቱን ባለቤት በአካል ያግኙ ዘንድ ይመከራሉ፦፦

ክፍል 3: ከስራ ጋር የተያያዙ መጠይቆች

ከዚህ በታች የተዘረዘሩት ጥያቄዎች ከስራ ጋር የተያያዙ ጉዳዮችን ይጠይቃሉ፦፦እያንዳንዱን ጥያቄ በጥሞና ካነበባችሁ በኋላ ከተሰጡ አማራጮች መካከል ላንዷ/ተ ትክክል ነው ያልሽዊን/ከውን ከፊት ለፊቱ በማክበብ ወይም የ√ አለበለዚያ የ(×) ምልክት ያድርጉ፦፦

301. በዚህ አንድ ወር ውስጥ እየሰሩ ያሉት በየትኛው ክፍል ውስጥ ነው?
1. መጃታ ህክምና ክፍል
2. ተመላላሽ ህክምና ክፍል
3. ቀዶ-ጥገና ህክምና ክፍል
4. የጽኑ ህሙማን ህክምና ክፍል
5. ላብራቶሪ ክፍል
6. ፋርማሲ ክፍል
7. የጨረር ህክምና ክፍል
8. ካልተገለጸ ይጥቀሱ......

302. በምስራበት ክፍል ውስጥ ለስራ የሚያስፈልጉ መገልገያ እቃዎች (ለምሳሌ ያህል እንደ ግላቭ፣ መድሃኒት፣ ሲሪንጅ እና የመሳሰሉ) እጥረት አለ፦፦
1. ሁል ጊዜ

2. አብዛኛዉን ጊዜ
3. አንዳንድ ጊዜ
4. አልፎ አልፎ
5. በፍጹም

303. ከስራየ ሁኔታ የተነሳ በበሽታ/ህመም እያዛለሁ የሚል ፍራቻ አለኝ፡፡
    1. ሁል ጊዜ
    2. አብዛኛዉን ጊዜ
    3. አንዳንድ ጊዜ
    4. አልፎ አልፎ
    5.በፍጹም

304. ከስራ ግብታየ እፈናቀላለሁ/እባረራለሁ የሚል ፍራቻ አለኝ
    1. ሁል ጊዜ
    2. አብዛኛዉን ጊዜ
    3. አንዳንድ ጊዜ
    4. አልፎ አልፎ
    5.በፍጹም

305. በህሙማን፣በህሙማን ቤተሰቦች ወይም በስራ ባልደረቦቸ የቃላት ዘለፋ/ስድብ ወይም ድብደባ ይደርስብኛል፡፡
    1. ሁል ጊዜ
    2. አብዛኛዉን ጊዜ
    3. አንዳንድ ጊዜ
    4. አልፎ አልፎ
    5.በፍጹም

ከዚህ በታች ባሉት ሶስት ሰንጠረጆች ውስጥ የተካተቱ ጥያቄዎች ከላይ ከስራ ሁኔታ*ጋር* ተያያዥነት ካላቸው ጥያቄዎች የቀጠለ ሲሆን ለተሳታፊዎች አመች በሆነ መንገድ የተዘጋጁ ናቸው፡፡ስለሆነም ለያንዳንዱ ጥያቄ መልስዎን ከፌት ለፌት በተሰጠ ክፍት ቦታ ዉስጥ የ"√" ወይም "X" ምልክት በማድረግ ይመልሱ፡፡

ሰንጠረዥ 3.1

ተ.ቁ	የቀጠሉ ጥያቄዎች	አዎ	የለም
306	የስራ ድርሻን/ህን በውል ታውቂዋለሽ/ለህ?	1	0
307	በሀኪም የተመረመረ የአካል ጉዳት ወይም ህመም ባለፈዉ አንድ ወር ውስጥ ገጥሞሻል/ሀል?	1	0
308	በእእምሮ ሀኪም የተመረመረ የእእሮ መታዋክ/ህመም ገጥሞሽ/ህ ያውቃል?	1	0
309	ከመስሪያ ቤት ስራ ዉጪ የምትሰራው/ራው የትርፍ ጊዜ ስራ ወይም ትምህርት አለሽ/ህ?	1	0
310	ባለፈው አንድ ወር ውስጥ በአብዛኛው የምሽት/የሌሊት ተረኛ ነበርሽ/ህ?	1	0
311	የተሰማራሽበት የስራ ሙያ ምርጫሽ/ህ ነበር?	1	0
312	ባለፈው አንድ ወር ዉስጥ በስራ ላይ እያለሽ/ህ በህመምትኞችሽ/ህ ላይ የህክምና ስህተት ፈጽመሽ/ህ ነበር?	1	0

ሰንጠረዥ 3.21

ተ.ቁ	የቀጠሉ ጥያቄዎች	በጣም ጥሩ ነው	ጥሩ ነው	ጥሩ አይደለም	መጥፎ ነው
313	ከስራ ባልደረባዎችዎ የሚያገኙትን ሙያዊ እርዳታ እንዴት ይገልጹታል?	0	1	2	3
314	ከአለቃዎችዎ የሚያገኙትን ሙያዊ እርዳታ እንዴት ይገልጹታል?	0	1	2	3

315	ከአስተዳደሮች የሚያገኙትን እርዳታ እንዴት ይገልፁታል	0	1	2	3
316	ከስራ ባልደረቦቻችዉ ጋር ያለዎትን ግንኙነት እነዴት ይገልፁታል?	0	1	2	3
317	ከአለቃዎችዉ ጋር ያለዎትን ግንኙነት እንዴት ይገልፁታል	0	1	2	3
318	ከአስተዳደሮች ጋር ያለዎትን ግንኙነት እንዴት ይገልፁታል ?	0	1	2	3
319	ሆስፒታል ዉስጥ ያለዉን ያስተዳድር ሁኔታ እንዴት ይገልፁታል?	0	1	2	3

ሰንጠረዥ 3.3

ተ.ቁ	የቀጠሉ ጥያቄዎች	በጣም እስማማለሁ	እስማማለሁ	አልስማማም	በጣም አልስማማም
320	የስራ ጫና አለ፡፡	0	1	2	3
321	በትምህርት ደረጃዬና በስራ ዉጤቴ መሰረት ተገቢዉን ማበረታቻ አገኛለሁ፡፡	0	1	2	3
322	የስራ አካባቢ እና የስራ ክፍሎች ለስራ አመች ናቸዉ፡፡	0	1	2	3
323	መስሪያ ቤት ዉስጥ ለሙያ እዉቅና ይሰጣል፡፡	0	1	2	3
324	ወርሃዊ ደመወዜ ከስራዬ አንጻር አጥጋቢ ነዉ፡፡	0	1	2	3

ክፍል 4: በስራ ምክንያት የሚመጣ ድካምን በተመለከተ

ከዚህ በታች ያሉ ጥያቄዎች የሚጠይቁት ከስራ ጋር ተያይዘ ለሚከሰቱ የአካል ወይም የእምሮ ድካምን ነዉ፡፡ስለሆነም እያንዳነዱን ጥያቄ እያነበቡ ይስማማል የሚሉትን መልስ በተሰጠው ክፍት ቦታ ላይ የ(√) ወይም የ(×) ምልክት ያድርጉ፡፡

ሰንጠለዥ 4.1

ተ.ቁ	ጥያቄዎች	ሁልጊዜ	አብዛኛዉን ጊዜ	አንዳንድ ጊዜ	አልፎ-አልፎ	በፍፁም
401	ከስራ ቀን በኋላ የመዳከም ስሜት ይሰማዎታል?	100	75	50	25	0
402	ጠግነት ጠዋት ሌላ የስራ ቀን እንደሚጠብቅዎት ባሰቡ ጊዜ ይደክምዎታል?	100	75	50	25	0
403	ለእርስዎ እያንዳንዱ የስራ ሰዓት አድካሜ መስሎ ይታይዎታል?	100	75	50	25	0
404	በትርፍ ጊዜዎ ቤተሰብና ጋደኞች ጋር ለማሳለፍ ጉልበት ያጥርዎታል?	100	75	50	25	0
405	በምን ያህል ጊዜ ድካም ይሰማዎታል?	100	75	50	25	0
406	በምን ያህል ጊዜ አካልዎ ይደክማል?	100	75	50	25	0
407	በምን ያህል ጊዜ ስሜትዎ ይደክማል?	100	75	50	25	0
408	"ካሁን በኋላ ልታገስ አልችልም" የሚሉት በምን ያህል ጊዜ ነዉ?	100	75	50	25	0
409	ድካምዎ የሚመጣዉ በምን ያህል ጊዜዉ ነዉ?	100	75	50	25	0
410	የድካምና ለበሽታ ተጋላጭነት ስሜት የሚሰማዎት በምን ያህል ጊዜዉ ነዉ?	100	75	50	25	0

ሰንጠለዥ 4.1

ተ.ቁ	ጥያቄዎች	በጣም በከፍተኛ መጠን	በከፍተኛ መጠን	በመካከለኛ መጠን	በዝቅተኛ መጠን	በጣም በዝቅተኛ መጠን
411	ስራዋ ያበሳጭዋታል?	100	75	50	25	0
412	በስራዋ ምክንያት የመድከም ስሜት አለዋት?	100	75	50	25	0
413	ስራዋ ስሜትን የሚያደክም ነው?	100	75	50	25	0
414	ከህሙማን ጋር መስራት አስቸጋሪ ሆኖብዋታል?	100	75	50	25	0
415	ከህሙማን ጋር መስራት የሚያበሳጭ ሆኖብዋታል?	100	75	50	25	0
416	ከህሙማን ጋር መስራት ጉልበትን የሚያሳጣ ነው?	100	75	50	25	0
417	ከህሙማን ጋር በምትሰርበት/ራበት ጊዜ ከምታጋኘው ጥቅም በላይ እያገለገለህ እንደሆን ይሰማሻል/ሃል?	100	75	50	25	0
418	ከህሙማን ጋር መስራት አድካሚ ነው?	100	75	50	25	0
419	እንዳንድ ጊዜ በቀጣይ ከህሙማን ጋር መስራትሽን/ህን ትጠራጠራለህ?	100	75	50	25	0

5. ከዕፅ ሱሶች ጋር የተያያዙ ጥያቄዎች

5.1.ከዚህ በታችያሉ ሶስት ጥያቄዎች ከጫት መቃም ልማድ ጋር ተያያዥነት ያላቸው ሲሆን መልስዎን በማክበብ ይመልሱ::

501	በህይወትዎ ዘመን አንድ ጊዜም ቢሆን ጫት ተጠቅመው ያውቃሉ?	አዎ	የለም
502	ባለፉት 12 ወራት ውስጥ ጫት ተጠቅመው ያውቃሉ?	አዎ	የለም
503	ጫትን የሚጠቀሙበት ምክንያት ምንድን ነው?	አዎ	የለም
	1.ስራዎትን ለማፋጠን	አዎ	የለም
	2.ጭንቀትዎን ለማስታገስ	አዎ	የለም
	3.ድካምዎትንና ረሀብዎትን ለመቀነስ	አዎ	የለም
	4.በስራዎት ባለመርካትዎ	አዎ	የለም
	5.ኃይማኖታዊ ልማድ በመሆኑ	አዎ	የለም
	6.በሌሎች ዘንድ ተቀባይነትን ለማግኘትና ሌሎችን ለመምሰል	አዎ	የለም
	7.ማህበራዊ ህይወትዎን ለመጠበቅ	አዎ	የለም
	8.ደስታን ለማግኘት	አዎ	የለም
	9.የወሲብ ደስታዎን ለማራዘም	አዎ	የለም
	10.ካልተጠቀስ ይግለፁ	አዎ	የለም

5.2.ከዚህ በታችያሉ ሶስት ጥያቄዎች ከአልኮል መጠጥ ልማድ ጋር ተያያዥነት ያላቸው ሲሆን መልስዎን በማክበብ ይመልሱ::

504	በህይወትዎ ዘመን አንድ ጊዜም ቢሆን የአልኮል መጠጦችን ለምሳሌ አረቄ፣ጠላ፣ጠጅ፣ቢራ ወይም ሌሎች አልኮል ነክ መጠጦችን ተጠቅመው ያውቃሉ?	አዎ	የለም
505	ባለፉት 12 ወራት ውስጥ ማንኛውንም አይነት የአልኮል መጠጥ ተጠቅመው ያውቃሉ?	አዎ	የለም
506	የሚጠቀሙ ከሆነ	አዎ	የለም
	1.የአልኮል መጠጥን ማቆም እንዳለብዎት ይሰማዎታል?	አዎ	የለም
	2.አልኮል በመጠጣትዎ በሚደርስብዎት ወቀሳ ይበሽቃሉ?	አዎ	የለም

3.አልኮል በመጠጣትዎ የሕሊያተኝነት ስሜት ይሰማዎታል?		እዎ	የለም
4.ጠዋት ጠዋት አልኮል መጠጣትን እንደ ዓይን መግለጫ ይጠቀማሉ?		እዎ	የለም

5.3.ከዚህ በታችያሉ ሶስት ጥያቄዎች ከትንባሆ ማጨስ ልማድ ጋር ተያያዥነት ያላቸው ሲሆን መልስዎን በማክበብ ይመልሱ፡፡

507	በህይዋትዎ ዘመን አንድ ጊዜም ቢሆን ማንኛውም የትንባሆ አይነት ተጠቅመው ያውቃሉ?	እዎ	የለም
508	ባለፉት 12 ወራት ውስጥ ማንኛውም የትንባሆ አይነት ተጠቅመው ያውቃሉ?	እዎ	የለም
509	ትንባሆን የሚጠቀሙበት ምክንያት ምንድን ነው?	እዎ	የለም
	1.ስራዎትን ለማፋጠን	እዎ	የለም
	2.ጭንቀትዎን ለማስታገስ	እዎ	የለም
	3.ድካምዎትንና ረሃብዎትን ለመቀነስ	እዎ	የለም
	4.በስራዎት ባለመርካትዎ	እዎ	የለም
	5.ኃይማኖታዊ ልማድ በመሆኑ	እዎ	የለም
	6.በሌሎች ዘንድ ተቀባይነትን ለማግኘትና ሌሎችን ለመምሰል	እዎ	የለም
	7.ማህበራዊ ህይዋትዎን ለመጠበቅ	እዎ	የለም
	8.ደስታን ለማግኘት	እዎ	የለም
	9.የወሲብ ደስታዎን ለማራዘም	እዎ	የለም
	10.ካልተጠቀስ ይግለፁ	እዎ	የለም

5.4.ከዚህ በታችያሉ ሶስት ጥያቄዎች ሀሺሺና ሌሎች የሀሺሺ ውጤቶችን የመጠቀም ልማድ ጋር ተያያዥነት ያላቸው ሲሆን መልስዎን በማክበብ ይመልሱ፡፡

507	በህይዋትዎ ዘመን አንድ ጊዜም ቢሆን ማንኛውም የሀሺሺ ውጤቶች ተጠቅመው ያውቃሉ?	እዎ	የለም
508	ባለፉት 12 ወራት ውስጥ ማንኛውም የሀሺሺ ውጤቶች ተጠቅመው ያውቃሉ?	እዎ	የለም
509	ትንባሆን የሚጠቀሙበት ምክንያት ምንድን ነው?	እዎ	የለም
	1.ስራዎትን ለማፋጠን	እዎ	የለም
	2.ጭንቀትዎን ለማስታገስ	እዎ	የለም
	3.ድካምዎትንና ረሃብዎትን ለመቀነስ	እዎ	የለም
	4.በስራዎት ባለመርካትዎ	እዎ	የለም
	5.ኃይማኖታዊ ልማድ በመሆኑ	እዎ	የለም
	6.በሌሎች ዘንድ ተቀባይነትን ለማግኘትና ሌሎችን ለመምሰል	እዎ	የለም
	7.ማህበራዊ ህይዋትዎን ለመጠበቅ	እዎ	የለም
	8.ደስታን ለማግኘት	እዎ	የለም
	9.የወሲብ ደስታዎን ለማራዘም	እዎ	የለም
	10.ካልተጠቀስ ይግለፁ	እዎ	የለም

ASSURANCE OF PRINCIPAL INVESTIGATOR

The undersigned agrees to accept responsibility for the scientific ethical and technical conduct of the research project and for provision of required progress reports as per terms and conditions of the college of Public Health and Medical Science in effect at the time of grant is forwarded as the result of this application.

Name of the student: _____

Date._____ Signature _____

APPROVAL OF ADVISORS

This thesis has been submitted with my approval as University advisor.

Name of the first advisor: _____

Date._____ Signature _____

Date of submission: _____

Name of the second advisor: _____

Date._____ Signature _____

Date of submission: _____