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Mental Distress and Associated Factors among Health Professionals Working in Tertiary Teaching Hospital, South West Ethiopia

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Abstract

Background: Health care is a demanding profession physically and mentally which contributes risk for mental distress. Even though it studied well in economically advanced nations, little is known among health professionals in Africa. The aim of this study was to assess prevalence and risk factors of mental distress among health professionals.

Methods: This study was conducted from November 15, 2013 to December 15, 2013 at JUTH using an institution based cross-sectional study design. All health professionals (N=403) were included from various disciplines. Self-report questionnaire (SRQ-20) was used to detect mental distress. Other structured questionnaire related to socio-demographic characteristics, burnout, work related condition, and substance use habits were used to collect data.

Result: Out of the total study participants (n=334), 29.9% (n=100) of them were found to have mental distress. Prevalence of mental distress among substance user health professionals was higher compared with non-users. After adjusting for potential confounders, 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: Identified association of work related factors with mental distress needs for immediate and far-reaching interventions of stress reduction therapy. Finding adequate prevention strategies to combat burnout seems therefore very crucial.

Keywords: Burnout; Ethiopia; Health professionals; Mental distress; Work related factors

Abbreviations: 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.

Introduction

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 [1,2].

Different studies proved that the incidence and prevalence of mental disorders in the working population is getting increased in the last decades. Mental distress affects 15 up to 25 percent of working population globally [3,4].

Mental distress is contributing greater impact negatively on global economy by affecting human resource through increasing absenteeism from work, sick leave, compensations and by other different reasons [5,6]. 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 [6,7]. Because, 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 [8].

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 [5,9,10].

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 [3,11].

Mental distress was found to be a big treat for institutions to deliver the required goals due to increasing in the turnover rate of staffs, shifting profession to non-clinical ones [10]. Many of lost work days each year are due to absenteeism, sick leave and unreasonable leave from work are attributed to mental distress and most of health professional employees consider quitting their jobs because of complaining about emotional instability and unable to solve stressful conditions of their work [12-14].

Health professionals with mental distress could not deliver the

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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 [10,14].

Mental distress due to stressful working conditions is the second most compensated case to employees following musculoskeletal disorders in Australia [15]. 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 [16]. Another 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 [17].

This study aimed to assess prevalence of mental distress and associated risk factors among health professionals working in tertiary teaching hospital and to generated baseline information.

Methods

An institution based cross-sectional study was conducted in Jimma University teaching hospital (JUTH) found in Jimma town. Jimma town is located 356 km southwest of Addis Ababa, the capital city of Ethiopia. JUTH is a teaching and tertiary level hospital and provides (or caters) inpatient and outpatient health service for around 15 million people living in southwest of Ethiopia. JUTH has a total of 11 wards (inpatient department), 523 beds and 403 permanently employed health professional staff.

This study was conducted in 2013 by using a cross-sectional study design. The aim of this study was to assess prevalence and risk factors of mental distress among health professionals working in JUTH. Self administer questionnaire was distributed to all health professionals working in JUTH (N=403) from November 15, 2013 to December 15, 2013 by recruited data collectors. Health professionals who were on grief in the last two month of data collection period and who were providing a free service for the hospital were excluded.

Mental distress was dependent variable used in multivariate analysis. It was screened by using the SRQ-20 items with cut-off point 6 and above scores. Scores below six points recoded for "No Mental Distress" and scores 6 and above recoded as "Yes for Mental Distress" again and analyzed through bivariate and multivariate logistic regression with independent variables.

Measures

The self-reporting questionnaire (SRQ-20) tool was used to detect mental distress. This instrument was developed by the WHO to screen mental distress in primary health care settings and community of low-income countries [18]. It asks about features of mental distress with "YES" or "NO" responses in each question over the past 1 month [18,19]. SRQ has been used widely validated for epidemiological studies in clinical and community settings in Ethiopia and in Africa [19,20]. The Sensitivity and specificity of this instrument in community setting was 0.85 and 0.94 respectively [21]. Mental distress was detected at a cut-off point 6 and above "YES" scores. Burnout was assessed by using Copenhagen's burnout inventory tool which was used and validated in different studies [22,23]. It asks about emotional and physical disturbances in terms of severity and frequency and found valid tool to assess level of burnout among professionals working in health care services. Alcohol use disorder was assessed by using CAGE tool at score of 2 above "YES" answers among four questions [24].

It is a valid and reliable screening tool for detection of alcohol use problems and 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.

Health profession

In this study refers to all trained and certified professionals who had direct involvement in health care service. It included physicians, nurses, pharmacist/druggist, laboratory technicians/ technologists, physiotherapist, anesthetist, sanitarian, x-ray technician and others.

Statistical analysis

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 bivariate logistic regression considered as continuous variables to identify their association with mental distress. All variables associated with mental distress at bivariate logistic regression were entered to multivariate logistic regression once to control potential confounders. Variables with p-value less than 0.05 in multivariate regression were declared to be independent predictors of mental distress.

Ethical clearance was obtained from Jimma University, College of Public Health and Medical Sciences ethical committee. Detailed information about the objective of the study was explained to all participants before questionnaire administered. Informed consent was obtained from each participant before starting data collection and confidentiality of each participant was kept.

Results

Characteristics of participants

Among 403 permanent employee health professionals of JUTH; 83% (n=334) of them were participated in this study. 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 in the same institution 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 (Table 1). Even though monthly salary analyzed as continuous variable to identify its association with mental distress, it was grouped by quartile to identify prevalence distribution of mental distress among age groups by using cross-tabulation.

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 (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

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 practitioner	11	3.3
	Others[4]	10	3.0
Have children	No	223	66.8
	Yes	111	33.2

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

Table 1: Socio-demographic characteristics of 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.	

Table 2: Bivariate logistic regression: Association of work related factors with mental distress among health professionals working in JUTH, December, 2013(n=334)

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) (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.

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. Thirty four percent (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 at least one child (26.9%, n=29).

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)

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[1]	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[2]	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)	
	Married	29(26.1)	82(73.9)	Ref.	0.180
	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[3]	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[4]	6(25.0)	18(75.0)	Ref.	

Note: [1]Muslim, Jehovah, no religion and others (unlisted); [2]Dawro, Keficho, Yem, Harari and siltie; [3]Medical doctor (general doctor and specialist), master's degree; [4]Psychiatrist nurse, Physiotherapist, anesthetist nurse and sanitarian

Table 3: Bivariate logistic regression: Association of socio-demographic variables 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)	Ref	
	No	38(21.1)	142(78.9)	0.36(0.17-0.77)	0.009
Level of burnout	High	58(51.8)	54(48.2)	4.47(2.37, 8.44)	
	Low	41(19.6)	168(80.4)	Ref.	<0.001

Table 4: Multivariate logistic regression: Variables identified to have statically significant associations with mental distress among health professionals working in JUTH, December, 2013 (n=334)

than participants scored below the mean.

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. Out of the total participants who reported idea of ending owns life, 79.17% (n=19) were with diagnosed mental health problems.

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 in bivariate analysis.

Multivariate logistic regression: Variables identified to have statistically significant associations with mental distress

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 independently 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 their peers claiming for good prospect of promotion (Table 4).

Discussion

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 dwellers [23,24]. 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 [25].

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 Iran among health professionals [26]. Health care insurance which is more practical in developed nations than in Ethiopian probably could have stressful conditions for health professionals. One the other hand the Iranian study used a different tool (GHQ) other than SRQ-20. Future research is needed to come up with a universal tool to detect mental distress. On the contrarily, it was found to be higher than similar study finding in Greece (20.7%) [11]. 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 [27]. 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. Furthermore the nature of health care could have higher stress level compared with other professions (accountants) due to the long stay with sick people. Similarly difference in the cut-off point used with SRQ-20 items may probably explain the differences additionally. The cut-off point used to define mental distress in our study was used in previous studies in Ethiopia [23,25] (Figure 1).

Poor prospect of promotion was found to be independent predictor

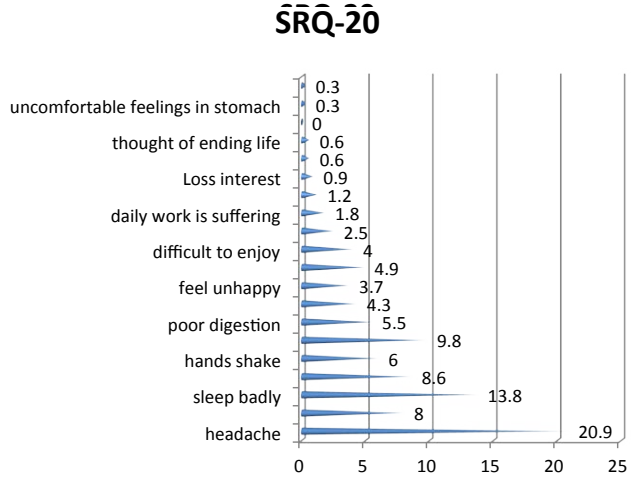

Figure 1: Distribution of SRQ-20 item scores among health professionals working in JUTH, December 2013 (n=334)

of mental distress. Meanwhile 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 findings in United Kingdom, Australia and Brazil [28-30] which all showed poor chance of promotion for health professionals leave risk of mental distress.

The current study found physical/verbal abuse as independent predictor of mental distress (AOR=2.37, 95%CI=1.23-4.54). Those participants encountered physical/verbal abuse were 2.37 times more likely at risk to have mental distress than their counterparts. It was found consistent with a study report 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 [31]. It was also in line with similar study finding 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 [32].

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) [31]. 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 [30]. Based on these evidences, burnout is found to be crucial and it needs an immediate intervention of health professionals and stakeholders for wellbeing and functionality of staffs.

A case-control study in United Kingdom and a longitudinal study in USA found history of psychiatric disorders as predictor for mental distress; which is against our finding (p=0.019) [28,33]. Stigma against mental illness may influence our study finding [34]. As a result participants might have fear to report their past experience of mental illness. Additionally difference in study design of the two studies (case-control vs. cross-sectional) and time-line gap between the two study periods may also contribute for the gap.

Even though our study found higher prevalence of mental distress among participants with alcohol use disorder (50.0%, n=24) and tobacco smokers (57.6%, n=19), no significant association identified at multivariate logistic regression. It was against with study findings in Ethiopia and Thailand, identified alcohol use disorder and tobacco smoking as predictors of mental distress [35,36]. Concurrent use of substances is common phenomenon in Ethiopia [27]. As a result using psycho-stimulants like khat in Ethiopia context may alleviate their distressing feelings. So that the difference might be availability and khat chewing habits of our participants (44%). Also other cofounders such as shisha smoking could have implications towards our finding.

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 by health professionals because of its access in health care facilities.

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.

Conclusion

This study was comparable with different study findings. Probably the most important findings of our study are; high burnout score, poor prospect of promotion, and physical/verbal abuse were found to be independent predictors of mental distress. 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.

This study calls for prevention of stressful conditions, setting rules and regulations as well as strengthening staff communications to prevent harassment at work place. Similarly, health professionals need promotions and incentives due to the demanding nature of their job.

Competing interest

The authors declare that they have no competing interests

Authors' contribution

BA developed hypothesis, supervised data collection, analyzed and wrote drafts of the paper. EG and MS provided expert advice on methodology, analysis and report compilation of the study findings. KT assisted and advised in proposal development and in giving comment for the result finding. All authors approved the final manuscript submission.

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