

Prevalence of major depressive disorder and Associated factors among academic staff of Bahir Dar University, North west, Ethiopia



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Introduction



- Depression is a common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-esteem, disturbed sleep or appetite, feelings of tiredness, and poor concentration, when it is severe there may be wish of death and suicide [2].
- Nearly one of every three of us experience psychiatric symptoms each year and nearly half of us have a family member or a close friend with serious mental illness one of the common illness is depression [2].

Introduction...



- Depression is not a sign of emotional weakness or laziness.
- It's normal for anyone to feel down from time to time dips in mood are an ordinary reaction to losses and disappointments in life.
- But if hopelessness, worthlessness take hold of you, and interfere with work, family, and your ability to enjoy life, you may be suffering from depression in this case it needs treatment[1, 3].

Introduction...



- Almost one million people take their own lives each year.
- For every person who commits suicide, there are 20 or more who make an attempt. [6].

Introduction...



- World Mental Health Day 2012 aims to encourage governments and civil society around the world **to address depression** as a widespread illness that affects individuals, their families and their peers.
- People should be **alert** to the early signs of depressive disorder it can affect anyone.

Introduction...



- According to WHO, depressive disorders were ranked as the **third leading cause** of the global burden of disease in 2004 and will move into the **first place** by 2030[5].
- The 2012 Depression package is intended to provide information about depression as a **treatable illness**, and to spread the message that recovery is possible and achievable.

Introduction...



- Academic staff have stressful work environment as they engaged in teaching, community service and research activities and stress is one cause for developing mental illness.
- However, the prevalence of major depressive disorder is **not studied among academic staff** of the universities in Ethiopia so far.

Introduction...



- This study aimed to determine the prevalence and associated factors of major depressive disorder among academic staff in Bahir Dar University, North West of Ethiopia.

Introduction...



- There is a significant association between depression and reduced cognitive function [7].
- Doing research on this area is mandatory because it also help us to improving the teaching learning activities.

Introduction...

- Studying depression in university staff is necessary for the policy makers for the staff and as a whole for the country to know the prevalence severity and associated factors of depression and to plan how to tackle this big problem.

Methods



- **Study design and setting**
- A cross sectional study was conducted among 345 participants on academic staff in Bahir Dar University from the total 2000 staff list from January to March 2016

Methods...

- (PHQ-9) a structured questionnaire, patient health questionnaire to assess prevalence rate of depression.
- It has been validated in Ethiopia health care context with specificity and sensitivity of 67% and 86% respectively.
- A cut of 10 or more has been used to screen Major depressive disorder for this [51].

Methods...



- WHO ASSIST (Alcohol, Smoking, involvement Screening Test) V3 –to assess substance related problems
- Oslo 3-items social support scale is used to assess the social support.

Methods...

- **Sampling size assumptions and sampling procedures**
- The sample size was determined by using single population proportion formula
- The prevalence of depression in the university students in Addis Ababa , Ethiopia is 27.7 this was taken to maximize the sample size with 5% margin of error (d) and 95% of confidence interval (p value < 0.05%).
- Based on this assumption the total sample size for the study was 310.

Methods...

- Then participants were selected using computer random selecting method
- Considering non response rate of 15% the final sample size will be $n = 310 + 47 = 357$. Academic staff at any age level was included in the study. With the above obtained values,

$$n = Z^2 p (1-p) / d^2$$

$$n = \frac{(1.96)^2 0.28 (1-0.28)}{(0.05)^2}$$

$$n = 310 + 47 = 357$$

Potential explanatory variables of depression



- Socio demographic variables of Academic staff Age, Sex, Religion, and Ethnicity, monthly income, marital status, educational status, family size and academic status, substance use.

Data collection procedures

- The data was collected by self administered standard PHQ -9,WHO ASSIST and Oslo 3-items social support scale .
- The data was collected by 10 trained messengers in each campus in Bahir dar University.
- The supervisor had masters degree in mental health.

Data collection procedures...

- The data collectors and supervisor were trained for two days and questionnaire pretested
- Supervisor did random spot-checking of the questionnaire to ensure reliability of the data.
- By the end of day the supervisor checked all the filled questionnaires for proper completion.
- The principal investigator randomly checked all the data each day for completeness.

Data collection procedures...



- **Pre-test of the tool**
- Pre-test conducted before the main study to identify potential problems in the data collection tools and to check the performance of the data collectors.
- The pre-test was conducted on 5% of the sample size in Bahir dar University whom they are not included in the study.
- **Necessary corrections were made accordingly.**

Data processing and analysis...

- Data collected, checked for completeness, coded and entered in to epi data for vesion 3.1.
- After double data entry verification, exported in to statistical package for social science (SPSS) version 20.
- After data cleaning descriptive statistics, Bivariate and multivariate analysis was

Data processing and analysis

- Variables entered to bivariate analysis to estimate the strength of the association using odds ratio (OR) Variables with P value of <0.25 again entered to multivariate analysis to determine the independent predictors of depression with P value of < 0.05 .
- Finally the result was presented by tables' and narrations.

Ethical approval

- Ethical clearance was obtained from the ethical review board of Bahir dar University.
- Written informed consent was obtained from each of the participants prior to the participation.
- Information obtained was kept confidential and anonymity during all stages of the study.
- Those who were identified to have major depressive disorder were sent to Felege Hiwot referral hospital.

Result and Discussion



- **Participants' characteristic**
- A total of 357 academic staff was included in this study and 345 responded with the response rate of 96.6%.
- Eight one percent of the respondents were male and 20% were female.
- Orthodox 79% ,Muslim10% and Protestant and Catholic religion followers11%.

Result and Discussion

- Amhara ethnicity accounts for 254 (73.6%) followed by Oromo 30(8.7%)
- Tigray 13(3.8%) and the rest 48(13.9%) were mixed Amhara oromo ethnicity and from different citizens like Indian and American

Result and Discussion...



Sociodemographic

..\Table1.docx



Result and Discussion...

Prevalence of depression and its severity

- The prevalence of major depressive disorder in academic staff using PHQ9 cut off 10 for major depressive disorder was 19.1%.
- When we describe the severity according to PHQ9 in general around 30 % of them have mild form of depression and 13% of them have moderate depressive disorder and 4% of them have moderate to severe depressive disorder and 2% of them have sever depressive disorder.

Result and Discussion...

Substance risk



- Moderate social support -37.7%
- Strong social support -34.8%
- Poor social support- 27.5%
- Low alcohol risk -40%,
- Moderate alcohol risk -13%
- High alcohol risk -3.2%

Result and Discussion...

Associated factors



- **Poor social support** [aOR= 4.50, CI= (2.00-10.12) P value <0.01
- **Moderate alcohol risk** [aOR 3.79, CI= (1.72-8.34)] P value <0.01,
- **Being graduate assistant and assistant lecturer** [aOR 2.81, CI= (1.56-5.07)] P value <0.01 were significantly associated with the development of major depressive disorder.

Result and Discussion...



- This is a study which is the first time to be done on academic staff in Ethiopia set up.
- Other studies showed depression in general community, student subject and facility based.

Result and Discussion...

- In this study the prevalence of major depressive was 19% which is high as compared to the depression among Ethiopian adults which is 17.5% [50].

But

- Less as compared to the study in 6kilo campus in Addis Ababa University students 27.7 % [49].

Result and Discussion...

- Academic staff that have poor social support is **4.73** times more likely to develop depression as compared to those who have strong social support.

Result and Discussion...

- Academic staffs that have moderate alcohol risk have **4.22** times high likely to develop major depressive disorder than those who are not using alcohol.
- Being graduate assistant and assistant lecturer were **2.81times** more likely to develop major depressive disorder than being lecture and above.

Result and Discussion...

- This might be because graduate assistant and assistant lecturers might have more jobs and might be stressed than lecturer and above or if someone educational level increased life might be less stressful but it needs further study.
- Depression in academic staff in general is higher as compared to the general community but less than the academic students.

Result and Discussion...

- This finding is consistent with the other study which explains University life has factors which might contribute to stress and trigger maladjustment that expresses as depression [19].
- In this study there was no significant association ($p>0.05$) on multivariate analysis for age, literacy level, college, Tobacco, cocaine, inhalants, hallucinogens, and monthly income.

Result and Discussion...



- But in the community study:
 - Being female, age of 55 years and above, poor social support, having a co morbidity medical illness, current tobacco smoking, and living alone were significantly associated with depression (50).
 - This study is inconsistent with the study in the community level because the participants of this study consist of the young population and less female in the academic staff and they have less physical health problem.



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Conclusion

- We find that the prevalence of depression in academic staff was high as compared to the general population in Ethiopia.
- Prevalence of depression in Academic staff was strongly associated with **poor social support; moderate alcohol risk, and being graduate assistant and assistant lecturer.**

Conclusion...



- Therefore academic staff in the universities should know this and change their life style to safe guard their mental health.
- For graduate assistant and assistant lecturer they should design better lifestyle to prevent their mental health.

Conclusion...



- For professionals in the field of psychiatry and higher officials we recommend developing fast intervention program to address this issue.
- According to this study nineteen percent of the academic staff needs antidepressant and thirty percent of them need psychotherapy.

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Danke!!
Thank you!!
Merci
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