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Prevalence and Associated Factors of Common Mental Disorders Among Adults in Bahir Dar City Administration, Northwest Ethiopia

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COLLEGE OF MEDICINE & HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF EPIDEMIOLOGY AND BIostatISTICS

**PREVALENCE AND ASSOCIATED FACTORS OF COMMON
MENTAL DISORDERS AMONG ADULTS IN BAHIR DAR CITY
ADMINISTRATION, NORTHWEST ETHIOPIA**

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MEDICINE AND HEALTH SCIENCES, IN PARTIAL FULFILLMENT OF
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BAHIR DAR, ETHIOPIA

BAHIR DAR UNIVERSITY

COLLEGE OF MEDICINE & HEALTH SCIENCES

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Abstract

Background: Common mental disorders such as depressive and anxiety disorders are a leading cause of disability and major public health issue in globally. However, the magnitude and associated factors at the community level is not well investigated in Ethiopia.

Objectives: To assess prevalence and associated factors of common mental disorders among adult in Bahir Dar City administration.

Method: A community based cross-sectional study was conducted on a randomly selected of 665 adults from October 10 to October 27, 2019. Self-reporting questionnaire (SRQ-20) was used to determine the prevalence of common mental disorders. Common mental disorders were defined as a cut-off point ≥ 8 score from SRQ-20 questionnaire. Data were collected with interviewer administer structured questionnaire by trained data collectors. The data were entered and analyzed by using SPSS version 23. Both simple and multiple binary logistic regression analysis were used to identify factors associated with common mental disorders. Adjusted odds ratio with 95% confidence level was used to determined significant association with outcome variables.

Result: The prevalence of common mental disorders in the study area was 34.1 % (95% CI=30%-38%). In this study, being females (AOR=1.78; 95% CI 1.12-2.84), divorced (AOR=2.45; 95% CI 1.37-4.37), widowed (AOR=2.65; 95% CI 1.44-4.86), unable to read and write (AOR=2.93; 95% CI 1.01-8.46), family history of mental illness (AOR=3.61;95% CI 2.27-5.75),chronic illness (AOR=3.84; 95% CI 2.38-6.20), alcohol users (AOR=3.29; 95% CI 1.86-5.81) and history of accident (AOR=5.06; 95% CI 2.43-10.51) were independently associated with common mental disorders.

Conclusion: The result of current study revealed a high prevalence of common mental disorders. Being female, widowed, divorced, unable to read and write, alcohol users, family history of mental illness, presence of chronic illness and history of accident are risk factors for development of common mental disorders. Ministry of health should design multi-sectorial approach.

Keywords: Prevalence, Associated factors, Common mental disorders, Adult, Ethiopia

Acronyms and abbreviation

AOR	Adjusted odds ratio
ASSIST	Alcohol, Smoking and Substance Involvement Screening Test
CAGE	Cut down, Annoyed, Guilty, Eye-opener
CI	Confidence Interval
CMDs	Common Mental Disorders
COR	Cured Odds Ratio
HHs	House holds
HIST	Hurt, Insult, Threaten, Scream
HIV	Human Immunodeficiency Virus
PI	Principal Investigator
SNNP	South Nations and Nationality people
SRQ	Self- Reporting Questionnaire
WHO	World Health Organization

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1. Introduction

1.1 Background

Common mental disorders (CMDs) refer to a range of depressive and anxiety disorders which are considered together because of their significant overlap in their occurrence in many peoples (1).

Depression is a common mental disorder that present with unhappy, loss of attention or desire, lessened energy, feeling of blame or low self-respect, disturbed sleep or appetite and poor attention and it have two sub groups such as major depressive disorders and dysthymia and Anxiety disorder is a group of mental disorders characterized by fear and feeling of anxiety (1).

None communicable diseases with co-morbid CMDs are a growing public health problem among adult (2). Common mental disorders are co-occurring with cardiac disease, diabetes, cancer and respiratory diseases. In addition, risk factors for none communicable diseases (NCD) such as unhealthy diet, tobacco use and physical inactively commonly cluster in people with common mental disorders(3).

At a global level, over 300 million (4.4%) and 264 million (3.6%) people are estimated to suffer from depression and anxiety disorders respectively(1). Depression was a major public health issue(4). In addition, the leading causes of disability in the world(5).

1.2 Statement of problem

Common mental disorders affect people across all regions of the world. One in five of adult (17.6%) within one year and 29.2% through life time can develop CMDs (6). Both high income and low and middle income countries, females were more likely to experience a mood or anxiety disorders(6).

Study done in Nigeria showed that, People with common mental disorders have comorbid physical illnesses and increased vulnerability of diabetes mellitus so from mental disorder patients 24.2 % were develop diabetes mellitus(7).

Systematic review done in Ethiopia indicated that, magnitude of common mental disorders 21.58 % and 36.43% was in general population and patients with comorbid condition respectively (8).

Community sample studies conducted in Ethiopia revealed that, the prevalence of CMDs were a wide variation range from 14.9% to 35.8% (9-13). Another study also done in Ethiopia institutional based revealed that, the magnitude of CMD were range from 23.2% to 63.1%,(14-26).

Systematic review conducted in Ethiopia revealed that, pooled prevalence of depression was 11.0% (27) and 39.73% among diabetic patients and 36.6 among people living with HIV(28, 29). Lifetimes and 12 month magnitude of depressive disorder in Ethiopia were 18% and 6.7% among adult outpatients respectively(30).

Persons with major depression have a 40% to 60% greater chance of dying prematurely than the general population (31).A study conducted in Ethiopia revealed that, 26.3% of individual who had major depression disorders were suicide (32).

Common mental disorder is a serious public health problem in Ethiopia. Institutional based studies conducted in Ethiopia revealed that, the prevalence of CMDs was high and wide variation from region to region. As different studies showed that, different factors were contributing for the occurrence of CMDs, such as socio demographic, physical condition and behavioral factors (14, 18-24). In Ethiopia most of the studies on common mental disorders were done in institutional based, which makes it difficult to obtain realistic estimate of the burden of common mental disorders in the community. Hence, this community based study was undertaken, with the objective to assess the prevalence and associated factors of common mental disorders among adults in Bahir Dar City Administration.

1.3 Significance of study

This study assessed the prevalence and associated factors of common mental disorders with community sample in the area. The result of this study help developing evidence based mental health promotion and disease prevention programs that are relevant to the study subjects and contributions to improve services as well as, create insight for policy makers for appropriate intervention strategies.

2. Literature review

2.1 Magnitude of common mental disorder

Studies conducted in Brazil revealed that, the prevalence of CMDs were 35.7% and 49% among women (33, 34). Studies done in Asia revealed that, the magnitude of CMDs were 14.4% and doubles from 11.5% in 1990 to 23.8% in 2010 (35, 36).

Another studies also done in India indicated that, the prevalence of CMDs were 33.5% among women reproductive age group and 18% among rural community (37, 38). Studies done in Kenya and Tanzania indicated that, prevalence of CMDs were 10.3% and 6.5% among community level (39, 40).

Deferent studies conducted in Ethiopia community sample indicated, the prevalence of CMDs were 14.9%, 32.4% and 33.6% among community level and 31% and 35.8% among women (10-13, 41). Another studies conducted in Ethiopia institutional based indicated that, the prevalence of CMDs were 23.2%, 27.6%, 28.1% and 32.7%, 39.2%, 46.6% and 58.6% among glaucoma patient, Ethiopian migrant, HIV patients, out patients, ANC follow up and admitted patients respectively (14, 17-19, 23, 24, 26), 35.2%, 38.3% and 63.1% among university student (20-22) and 36.1%, 58.4% and 62.7% among prisoners (15, 16, 25).

Another studies done the prevalence of CMDs in Jimma and Kombolcha towns showed that, 48.4% and 53.4% person with chronic physical health condition and 29.5% and 28.1% those without chronic physical health condition respectively (10, 13).

Study conducted in Kombolcha revealed that, 40.5% in 55 and above age groups, 41.2% in widowed, 48.5% in those who had no formal education, 33% in rural and 32.2% in urban and 33% in female and 31.7% in male (13).

2.2. Associated factor for common mental disorder

2.2.1. Demographic and Socio-Economic factors

Studies done in Kenya, India, SNNP, Jimma, Menlik II Referral hospital, Gondar and Ambo university and Kombolcha revealed that, females were higher risk of developing CMDs than males (10, 13, 18, 19, 22, 24, 30, 37, 40, 42). In contrary these studies conducted in Ethiopia, and Brazil showed that, gender not significant association with CMDs (11, 43, 44).

Studies conducted in India, Hariri regional state and Jimma town revealed that, when the age increases the risk of developing CMDs was increase (10, 11, 37, 40). On the other hand study done

in Menlik II Referral hospital showed that, the age increase the risk of CMDs was decrease (18). Studies conducted in Brazil among teachers, South Africa, Tanzania, Hawasa among HIV patients, Jimma among prisoners Kombolcha town and Gondar university revealed that, age was not statistically significant associated with CMDs (13, 14, 16, 19, 39, 43, 45).

Another studies done in Kenya, India, Jimma town and Gondar university hospital showed that, widowed were higher risk of developing CMDs than single (10, 19, 38, 40). But other study done in Addis Abeba among asthmatic patients indicated that, widowed was not associated with CMDs (44). Another studies also conducted in Saudi Arabia and Ethiopia indicated that, single marital status were higher risk of developing CMDs (44, 46). Studies conducted in Tanzania, Jimma town, Harar town, Addis Abeba and Arbaminch revealed that, divorced was not associated with CMDs (10, 17, 18, 39, 41). In other study done in Kenya showed that, divorced was associated with CMDs (40).

Study done in Kombolcha town showed that, small family size was statistically significant associated with common mental disorders (13). But studies conducted in Jimma town and Harar regional state showed that, family size was not associated with CMDs (10, 11).

Studies conducted in Tanzania, Kenya Jimma among prisoners and Hariri regional state revealed that, family income was statistically significant associated with common mental disorders (11, 16, 19, 39, 40). But other studies conducted in Jimma town, Harar town and Arbaminch showed that, income was not statistically significant associated with CMDs (10, 17, 41).

The studies done in Kenya, Jimma and Ambo towns showed that, self-employed, employed, house wife and merchants were statistically significant association with CMDs (10, 40, 47). Other studies conducted in Harar regional state, Arbaminch and Kombolcha town showed that, occupational status was not statistically significant associated with CMDs (11, 13, 41).

Study done in Addis Abeba revealed that, secondary school education was higher risk of developing CMDs than tertiary level of graduates (15). Another studies conducted in Jimma and Kombolcha towns and Gondar university hospital showed that, illiterate was higher risk of developing CMDs than literate (10, 13, 19). Another studies also conducted in Ethiopia revealed that, educational status was not statistically significant associated with CMDs (11, 18, 41).

2.2.2. Clinical factors

2.2.2.1. Family history of mental illness

Studies conducted in Tanzania, Addis Abeba, Bale Zone, Jimma, Harare and Kombolcha towns showed that, family history of mental illness was higher risk of developing common mental disorders than without family history of mental illness (12, 13, 15-17, 39). Other studies conducted in Ethiopia indicated that, family history of mental illness was not statistically significant associated with CMDs (11, 22, 24). Another study done also in Arbaminch town showed that, women with family history of mental illness were more likely to develop common mental illnesses than women without family history of mental illness(41).

2.2.2.2. History of chronic illness

Studies conducted in Brazil among women and India revealed that, history of chronic illness was statistically significant associated with CMDs (34, 37).

Another studies also conducted in different areas of Ethiopia in Hariri Regional state, SNNP, Jimma, and Kombolcha towns among community level, Arbaminch town among women, Addis Abeba and Hawassa Referral Hospital among pregnant mother showed that, who had chronic illness more likely to had CMDs than who did not had chronic illness (10-13, 18, 23, 24, 41, 48). But other studies conducted in Harar town among HIV patients and Jimma among prisoners showed that, history of chronic illness was not statistically significant associated with CMDs (16, 17).

2.2.2.3. History of accident

Study done in Northern Europe showed that, burn was positively associated with CMDs (49). Another study done in Uganda indicated that, history of past traumatic brain injury was statistically significant associated with CMDs(50).

2.2.3. Violence

Studies done in Asia among community and Brazil among women showed that, these who had history of violence were higher risk of developing CMDs (33, 36). Another study done in Rwanda population based indicated that, Psychological, Physical and sexual violence by intimate partner were statistically significant associated with common mental disorders (51).

Study done in Wando-Genet and south east Ethiopia indicated that, one in five pregnant women experienced IPV and it was strongly associated with depression (12, 52).

2.2.4. Behavioral factors

2.2.4.1 Khat chewing

In Ethiopia studies conducted in SNNP, Ambo, Jimma and Hariri Regional state showed that, Khat chewing was statistically significant associated with CMDs (10, 11, 16, 22, 24, 42). But other studies conducted in Harar and Kombolcha town indicated that, chewing khat was not statistically significant associated with CMDs (13, 17).

2.2.4.2. Consume Alcohol

In Ethiopia studies done in Harare town, Jimma, Debre Birhan and Gondar University referral hospital showed that, drinking alcohol was more likely to developing CMDs than those who were not drinking (17, 19, 21, 22). Other studies conducted in South Africa and Ethiopia revealed that, alcohol use not statistically significant associated with CMDs (10, 11, 13, 45).

2.2.4.3. Smoke Cigarette

Study done in South Africa showed that, smokers were higher risk of developing CMDs (45).

In Ethiopia studies conducted in Jimma university, Kombolcha town and Gondar University referral hospital indicated that, cigarette smokers were more likely risk of developing CMDs than none smokers (13, 19, 22). But other studies conducted in Brazil among women, Tanzania, south Africa and Ethiopian indicated that, cigarette smoking was not statistically significant associated with CMDs (10, 17, 18, 34).

3. Conceptual Framework

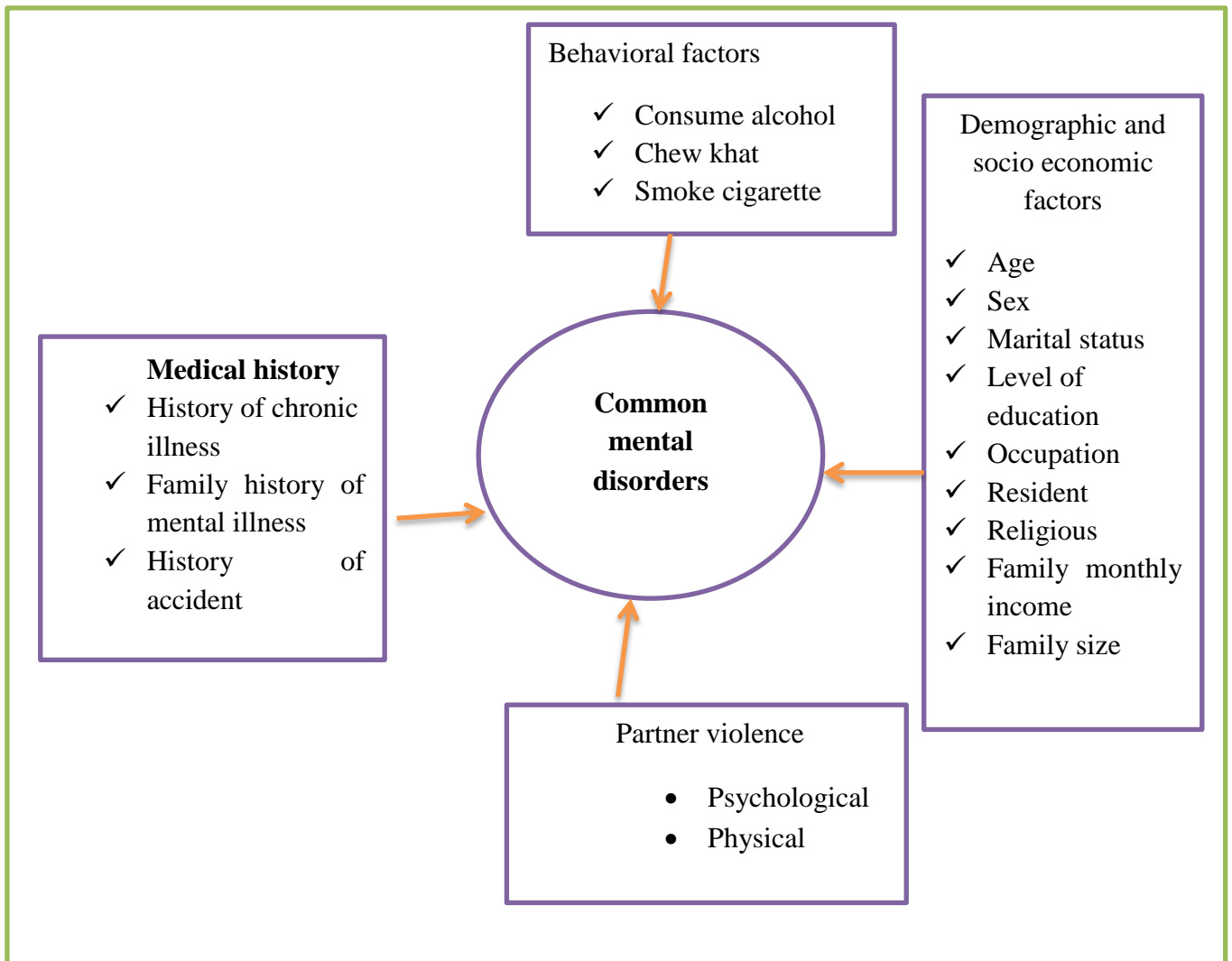


Figure 1. A Conceptual frame work derived from different literature of common mental disorder among adult in Bahir Dar City Administration, 2019

4. Objectives

4.1. General objective

To assess prevalence and associated factors of common mental disorders among adult in Bahir Dar City administration, Amhara Region, North West Ethiopia, 2019.

4.2. Specific objectives

1. To determine the prevalence of common mental disorders among adult in Bahir Dar City Administration.
2. To identify associated factors of common mental disorders among adult in Bahir Dar City Administration.

5. Method and Material

5.1. Study design and period

Community based cross-sectional study was conducted from October 10 to October 27, 2019.

5.2 Study area

Bahir Dar city Administration is located at a distance of 550 Km from the capital city Addis Abeba. The city Administration has 6 sub cities and 12 rural kebeles with current estimated population of 324,314 according to the 2007 National Housing and population census projection. The city Administration has three public hospitals, ten public health centers, ten health posts and forty-six different types of private health facilities. Psychiatric inpatient and outpatient services are available only governmental hospitals and private general hospitals (53).

5.3. Source population

Peoples aged 18 and above years and living in Bahir Dar City Administration at least six months.

5.4. Study population

Peoples aged 18 and above and living at least six month in selected kebeles of Bahir Dar City Administration.

5.5. Eligibility criteria

5.5.1. Inclusion criteria

People aged 18 and above years were residing in Bahir Dar City.

5.5.2. Exclusion criteria

The exclusion criteria were seriously ill person, hearing impairment and failure to speak.

5.6. Study variable

Dependent variable: Common mental disorders. (Present/Absent)

Independent variables: These are, demographic and socio economic variables (Age, sex, family size, marital status, religion, educational status, residence, occupation, household monthly income), behavioral factors (khat Chewing, Cigarette smoking and consume alcohol), family history of mental illness, history of accident, history of chronic illness (HIV/AIDS, Hypertension, Diabetic

mellitus, Asthmatic, Cancer, Heart disease), history of accident and history of intimate partner violence (psychological, physical).

5.7. Operational Definitions

Common mental disorders: A score of ≥ 8 yes in SRQ-20 in the past 4 weeks were considered as having common mental disorders.

Alcohol user: A person who answers two and above yes in CAGE questionnaires were considered as Alcohol users (54)

Cigarette smoker: By using WHO ASSIST V3.0 Questions cigarette smokers could be categorized as low (0-3 score), moderate (4-26 score) and high (≥ 27 score) (55).

Chat user: By using WHO ASSIST V3.0 Questions chat user could be categorized as low (0-3 score), moderate (4-26 score) and high (≥ 27 score) (55).

Chronic medical illness: A person, who had at least one of the six chronic disease mentions (hypertension, diabetes mellitus, asthmatic, HIV/AIDS, cancer, heart disease).

Family history of mental illness: A person, who had at least one of family with mental illness mentions (mother/father, sister/brother, grandmother/father and sibling).

Partner violence: score greater than 10.5 among the four Likert scale questions of HITS questionnaire were considered as partner violence (56).

Employed: Respondents who working government or non -governmental institution.

Self-employed: Respondents who are large or small scale merchants are entrepreneurs, work in small enterprise and micro finance.

Permanent residents: A person who lives in selected kebeles at least for six months.

5.8. Sample size determination

For objective one: The sample size for the prevalence of common mental disorders among adults was calculated by using single population formula. From the study done in Jimma town showed that the prevalence of CMD among adults was 33.6% (10).

$n = (Z/d)^2 p (1-p) = (1.96/0.05)^2 (0.336) (0.664) = 343$. With 10% none response rate and design effect of 1.5 the total sample size was 567.

Where,

n= the desired sample size

p= prevalence of common mental disorders from the previous study

Z= 1.96 at 95% confidence level

d= margin of error (5%)

For objective two: Factors associated with CMDs among adults. In this case the sample size was calculated by using EPI Info version 7 software programs Flesis/cc. By using different studies conducted in different areas of Ethiopia at community level.

Table1. Sample size determination for common mental disorders among adult by using associated factors

Associated factors considered	CL %	Power (%)	Ratio(unexposed to exposed)	Outcome in unexposed group %	AOR	Calculate sample size(flesis/cc)	Final sample size with design effect (1.5)and NRR(10%)
No formal education(13)	95	80	4.09	22.2	6.16	77	128
Smoker(13)	95	80	11.5	28.9	5.99	161	266
Sex(10)	95	80	0.92	23.5	2.09	302	498
Age(48-57years)(10)	95	80	1.49	21.1	6.79	49	81
House wife(10)	95	80	5.5	27.7	3.37	192	316
Family history of mental illness(13)	95	80	6.31	27.1	3.92	168	277
Khat chewing(11)	95	80	1.08	10.3	2.3	403	666

By using associated factors the sample size was calculated and becomes 605. With 10% non-response rate, the total sample size was 666. Therefore, the final sample size which was the largest of all was determined to be 666.

5.9. Sampling technique

Multi-stage sampling technique was employed for the study. The study unit was housing units with the assumption that each housing unit would have sampling subjects. Three kebeles were selected from 12 rural kebele by using simple random sampling technique due to rural kebeles had homogeneity and all sub-Cities were selected due to their heterogeneity. The number of participants that were selected from each sub cities and selected rural kebeles proportionally based on the household size within sub cities and kebeles. Systematic random sampling technique was used to select study unit. The first study unit was selected randomly between 1st and Kth- (K=83) and study subjects every kth housing were interviewed. In selected house hold where more than one eligible adult were found, a lottery method was used to select one.

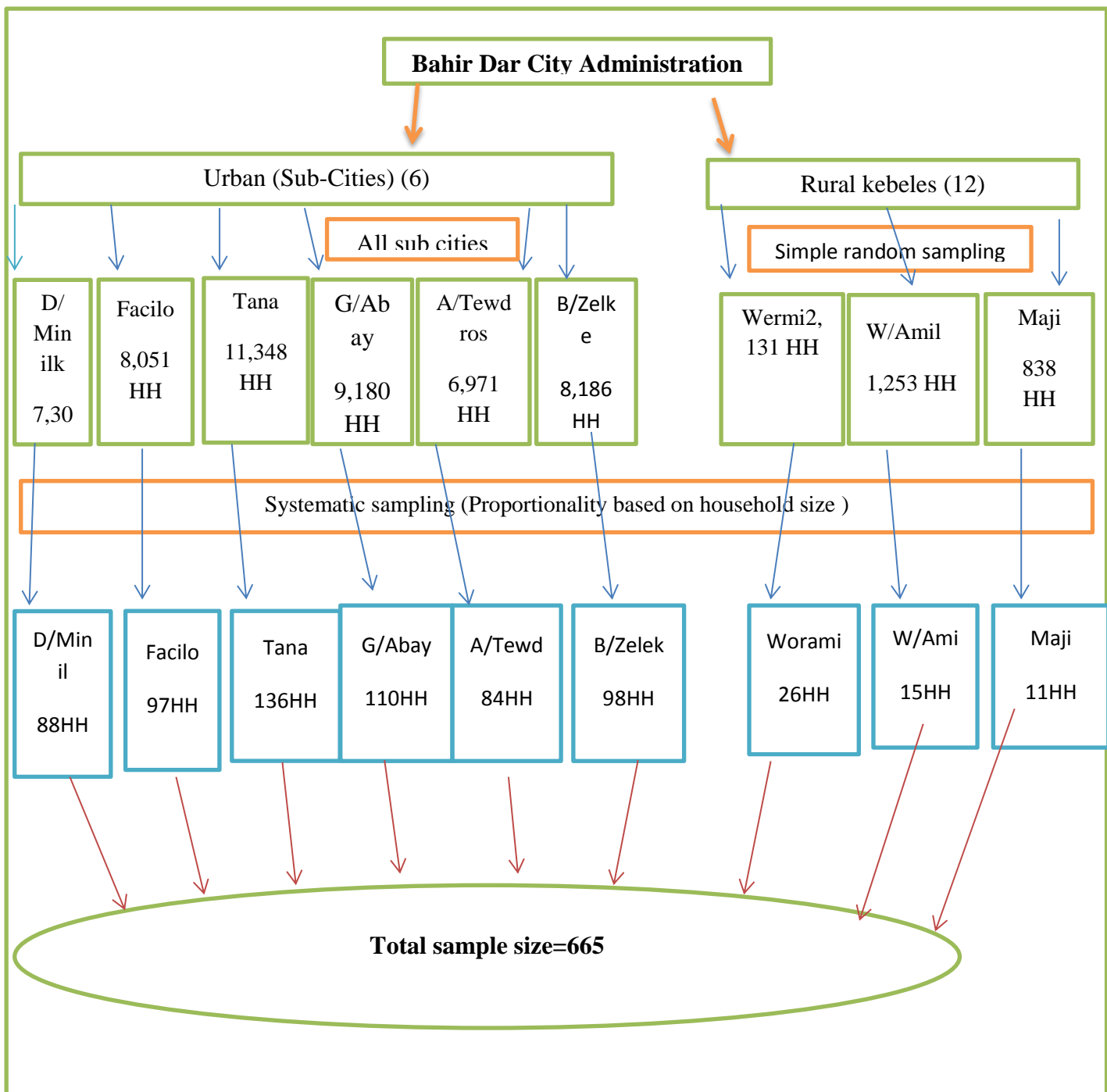


Figure 2: Schematic presentation of sampling procedures in Common mental disorder among adults of Bahir Dar City Administration, Northwest Ethiopia, 2019

5.10. Data collection tools

Data were collected through face to face interview with structured questionnaire by trained data collectors. The questionnaires adopted from previous studies to assess socio demographic characteristics, history of chronic illness, family history of mental illness, history of accident, CAGE questionnaire was used for screening for alcohol users (54), HITS questionnaire was used for screening for intimate partner violence (56), WHO ASSIST V3.0 questionnaire used for to categorized cigarette smoking and chat chewing (55) and Self-reporting questionnaire (SRQ-20) was used to determine the prevalence of CMDs which is developed by the World Health Organization (WHO) (57). Which contains 20 yes/ no questions and originally designed as self-administered scale but was also found to be suitable for interviewer administered questionnaire because of the low literacy rate in developing countries. A score of all questions was combined. The minimum and maximum scores were 0 and 20 from ranging from 0 to 20 with cut-off point 7/ 8 previous community based studies in Jimma, Ethiopia(10). CMDs were defined as a cut-off point ≥ 8 score from SRQ-20 questionnaire. The questionnaires were first developed in English language and translated to Amharic language with back translation to English language for consistency. Amharic version questionnaire was used for data collection as Amharic is a local language for the study area. Eligible respondents not available at home during the first visit of data collection were revisited two times on the next day and if not found the next house eligible respondent substitute.

5.11. Data quality assurance

Five percent (33) of the sample size were pre-test in two randomly selected kebeles one from urban (Merawi town) and one from rural (Woreb kebele) which was not involved in the actual data collection to check for applicability and understandability of the instrument before one week of the main data collection period and we did not get any challenge. Therefore, the questionnaire was used without modification.

Two health officer supervisors and 7 clinical nurse data collectors were employed and trained for one day about the objective of study, instruments, the process of proper data collection and handling procedures. The supervisors were trained to check for completeness of the questionnaire. Regular supportive supervision was done by the principal investigator for cross checking of the data completeness and missing value every day among the data collectors and the supervisors.

5.12. Data processing and Analysis

Data were checked, coded and entered into Epi data version 3.1 and exported to SPSS version 23 for analysis. Descriptive statistics like frequencies, percentages, mean, standard deviation, tables and

figures were used to the present data. Binary Logistic regression analysis was used to explore association and identify independently associate variable with pattern of outcome variable. Simple binary logistic regression analysis was done to check the association between each independent variable with the outcome variable. Thus, all variables with p-value less than 0.2 in the simple binary logistic regression analysis were entered into multiple binary logistic regression analysis. Enter method was used and P-value of less than to 0.05 on multiple binary logistic regressions were finally considered as significantly associate with outcome variable. The strength of association of the variable was determined using adjusted odds ratio and 95%confidence level. Goodness-of-fit of model was checked by Hosmer and Lemeshow's with p- value 0.256.

5.13. Ethical consideration

Ethical clearance was obtained from institutional review board of Bahir Dar University College of medicine and health science after reviewing the proposal. Supportive letter was taken from IERB of APHI for Bahir Dar city administration health department. Respondents were provided information on the purpose of the study, data confidentiality and their right to refuse the participation in the study at any time. Verbal consent was obtained from the study respondents. By using SRQ-20, respondents who scores ≥ 8 were given an advice.

6. Result

6.1 Socio-demographic characteristics of respondents

A total of 648 adults participated in this study making response rate 97.3%. The median age of respondents in this study was 38 years. Minimum age was 18 years and maximum age was 66 years. Greater than half (53.2%) of respondents were female. Almost two thirds of respondents were Orthodox. Majority of (91.7%) the respondents were urban dwellers (Table 2).

Table2: Socio-demographic characteristics of study participants in Bahir Dar City Administration, Ethiopia, 2019 (n=648)

Variables		Frequency	Percent
Sex	Male	303	46.8
	Female	345	53.2
Age in years	18-27	167	25.8
	28-37	153	23.6
	38-47	148	22.8
	48-57	92	14.2
	>57	88	13.6
Religion	Orthodox	408	63.0
	Muslim	203	31.3
	Protestant	37	5.7
Marital status	Married	288	44.4
	Divorced	113	17.4
	Widowed	88	13.6
	Single	159	24.5
Resident	Urban	594	91.7
	Rural	54	8.3
Education	Unable to read & write	70	10.8
	Only able to read & write	114	17.6
	Primary school	109	16.8
	Secondary school	175	27.0
	College & above	180	27.8
Occupation	Farmer	57	8.8
	Unemployed	178	27.5
	Self employed	217	33.5
	Employed	136	21.0
	Student	60	9.3
Gross monthly income (ETB)	0-2505	162	25.0
	2506-3999	151	23.3
	4000-5000	212	32.7
	>5000	123	19.0
Family size per house hold	≤4	534	82.4
	>4	114	17.6

6.2 Prevalence of common mental disorders

The prevalence of common mental disorders among adult in Bahir Dar city administration was 34.1 % (95% CI 30%-38%). The prevalence of CMDs in female were 41.7 % (95% CI 37%-47%) and 25.4% (95% CI 20%-30%) in male. The prevalence of CMDs was found to be 39% & 49 % in those age group 48-57 years and greater. Regarding to marital status prevalence of CMDs was 54.0% and 56.8% in divorced and widowed respectively. Regarding to educational and occupational status prevalence of CMDs was in unable to read and write; able to read and writes and unemployed were 57%, 51.8% and 46.6% respectively.

Table 3: Prevalence and associated factors of CMDs among residents of Bahir Dar City Administration, Ethiopia, 2019

Variables		CMD- n (%)	None-CMD n (%)	Total (%)
Sex	Male	77(25.4)	226(74.6)	303(46.8)
	Female	144(41.7)	201(58.3)	345(52.2)
Age	18-27	31(18.6)	136(81.4)	167(25.8)
	28-37	51(33.3)	102(66.7)	153(23.6)
	38-47	60(40.5)	88(59.5)	148(22.8)
	48-57	36(39.0)	56(61.0)	92(14.2)
	>57	43(49.0)	45(51.0)	88(13.6)
Resident	Urban	204(43.3)	390(65.7)	594(91.7)
	Rural	17(31.5)	37(68.5)	54(8.3)
Religion	Orthodox	141 (34.6)	267 (65.4)	408(63.0)
	Muslim	68 (33.5)	135 (66.5)	203(31.3)
	Protestant	12 (32.4)	25 (67.6)	37(5.7)
Marital status	Married	77 (26.7)	211 (73.3)	288(44.4)
	Divorced	61 (54.0)	52 (46.0)	113(17.5)
	Widowed	50 (56.8)	38 (43.2)	88(13.6)
	Single	33 (20.8)	126(79.2)	159(24.5)
Education	Unable to read & write	40 (57.0)	30 (43.0)	70(10.8)
	Only read & write	59(51.8)	55 (48.2)	114(17.6)
	Primary school	38 (35.0)	71 (65.0)	109(16.8)
	Secondary school	41 (23.4)	134 (76.6)	175(27.0)
	College & above	43 (24.0)	137 (76.0)	180(27.8)
Occupation	Farmer	22 (38.6)	35 (61.4)	57(8.8)
	Unemployed	83 (46.6)	95 (53.4)	178(27.5)
	Self employed	74 (34.0)	143 (66.0)	217(33.5)
	Employed	32 (23.5)	104 (76.5)	136(21.0)
	Student	10 (16.7)	50 (83.3)	60(9.2)
Gross monthly income	0-2505	78(48.0)	84(52.0)	162(25.0)
	2506-3999	38(25.2)	113(74.8)	151(23.3)
	4000-5000	75(35.4)	137(64.6)	212(32.7)
	>5000	30(26.2)	93(73.8)	123(19.0)
Family size	≤4	195(36.5)	339(63.5)	534(82.4)
	>4	26(22.8)	88(77.2)	114(17.6)

Alcohol use	No	174(32.2)	367(67.8)	541(83.5)
	Yes	47(44.0)	60(56.0)	107(16.5)
Cigarette Smoking	Low	12(43.0)	16(57.0)	28(26.4)
	Moderate	23(54.8)	19(45.2)	42(39.6)
	High	20(55.6)	16(44.4)	36(34.0)
Chat use	Low	19(32.2)	40(67.8)	59(29.8)
	Moderate	37(43.5)	48(56.5)	85(42.9)
	High	33(61.0)	21(39.0)	54(27.3)
Family history of mental illness	No	120(25.0)	359(75.0)	479(73.9)
	Yes	101(59.8)	68(40.2)	169(26.1)
History of chronic illness	No	92(21.0)	344(79.0)	436(67.3)
	Yes	129(60.8)	83(39.2)	212(32.7)
Accident	No	194(32.3)	406(67.7)	600(92.6)
	Yes	27(56.3)	21(43.7)	48(7.4)
Violence	No	173(31.3)	380(68.7)	553(85.3)
	Yes	47(50.5)	47(49.5)	95(14.7)

The most common neurotic symptom in this study were sleep badly 463(12%), often have headaches 429(11%) and anger or worried 366 (9%).

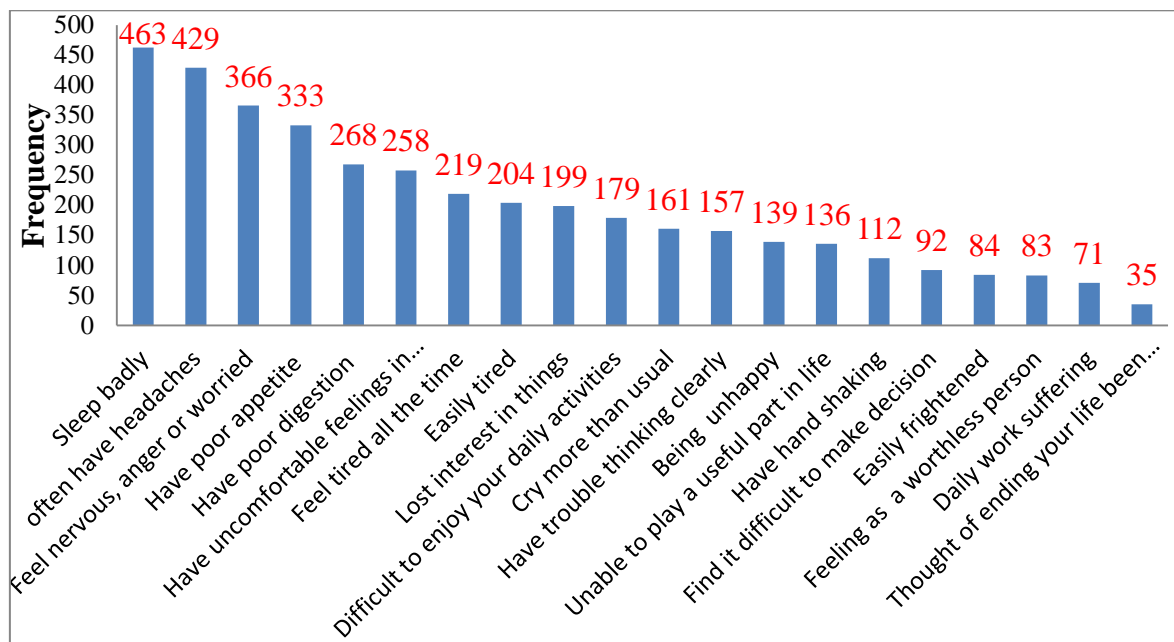


Figure 3: Distribution of symptoms of the SRQ-20 among adult in Bahir Dar City Administration, North West Ethiopia, 2019

6.3 Factors associated with common mental disorders

Simple binary logistic regression analysis showed that, sex, age, marital status, educational status, occupation, family size, family monthly income, history of accident, family history of mental illness, history of chronic illness, alcohol users and history of violence of the respondents were statistically significant associated with CMDs.

In multiple binary logistic regression analysis, the odds of developing CMDs were 2 times (AOR=1.78; 95% CI 1.12-2.48) higher in females than males. The odds of CMDs was 2.5 times (AOR=2.45; 95% CI 1.37-4.37) higher in divorced and 2.6 times (AOR=2.65; 95% CI 1.44-4.86) higher in widowed than those married. The odds of CMDs was 3 times (AOR=2.93; 95% CI 1.01-8.46) higher in unable to read and write than college and above.

Individuals who had family history of mental illness were 3.6 times more risk to developing CMDs than counterparts (AOR=3.61; 95% CI 2.27-5.75), respondent having one or more chronic illness had 4 times (AOR=3.84;95% CI 2.38-6.20) higher risk of developing CMDs than those without the illness.

The odds of developing CMDs were 3 times (AOR=3.29; 95% CI 1.86-5.81) higher in alcohol users than those non users. Respondents having history of accident were 5 times (AOR=5.06; 95% CI 2.43-10.51) more likely having CMDs than those without history of accident.

Table 4: Multiple binary logistic regression analysis of common mental disorders & associated factors among residents of Bahir Dar City Administration, Ethiopia,(n=648), 2019

Variables	CMDs(%)	N-CMDs(%)	COR(95% CI)	AOR(95% C.I)
Sex				
Male	77(25.4)	226(74.6)	1.00	1.00
Female	144(41.7)	201(58.3)	2.10(1.50-2.94)	1.78(1.12-2.84)*
Age of respondents in years				
18-27	31(18.6)	136(81.4)	1.00	1.00
28-37	51(33.3)	102(66.7)	2.19(1.31-3.67)	1.86(0.91-3.79)
38-47	60(40.5)	88(59.5)	2.99(1.79-4.98)	1.59(0.72-3.51)
48-57	36(39.0)	56(61.0)	2.82(1.59-4.99)	1.05(0.42-2.60)
>57	43(49.0)	45(51.0)	4.19(2.36-7.42)	1.35(0.55-3.30)
Marital status				
Married	77(26.7)	211(73.3)	1.00	1.00
Divorced	61(54.0)	52(46.0)	3.21(2.04-5.05)	2.45(1.37-4.37)*
Widowed	50(56.8)	38(43.2)	3.61(2.19-5.92)	2.65(1.44-4.86)*
Not married	33(20.8)	126(79.2)	0.71(0.45-1.14)	1.90(0.95-3.79)
Family size per house hold				
≤ 4	195 (36.5)	339(63.5)	1.94(1.21-3.12)	1.69(0.92-3.08)
>4	26(22.8)	88(77.2)	1.00	1.00
Educational status				
Unable to read & write	40(57.0)	30(43.0)	4.24(2.36-7.62)	2.93(1.01-8.46)*
Only able to read & write	59(51.8)	55(48.2)	3.41(2.06-5.64)	2.45(0.97-6.21)
Primary school	38(35.0)	71(65.0)	1.70(1.01-2.87)	1.19(0.49-2.87)
Secondary school	41(23.4)	134(76.6)	0.97(0.59-1.59)	0.99(0.45-2.17)
College & above	43(24.0)	137(76.0)	1.00	1.00
Occupational status				
Farmer	22(38.6)	35(61.4)	3.14(1.32-7.45)	0.27(0.07-1.01)
Unemployed	83(46.6)	95(53.4)	4.36(2.08-9.15)	1.18(0.42-3.32)
Self Employed	74(34.0)	143(66.0)	2.58(1.24-5.39)	1.02(0.37-2.80)
Employed	32(23.5)	104(76.5)	1.53(0.70-3.37)	0.67(0.20-2.26)
Student	10(16.7)	50(83.3)	1.00	1.00
Family monthly income(ETB)				
0-2505	78(48.0)	84(52.0)	2.87(1.72-4.81)	1.03(0.51-2.10)
2506-3999	38(25.2)	113(74.8)	1.04(0.60-1.81)	0.53(0.26-1.05)
4000-5000	75(35.4)	137(64.6)	1.69(1.03-2.79)	0.94(0.50-1.77)
>5000	30(26.2)	93(73.8)	1.00	1.00

Table 6: Multiple binary logistic regression analysis of common mental disorders & associated factors among residents of Bahir Dar City Administration, Ethiopia,(n=648), 2019

Variables	CMDs (%)	N-CMDs (%)	COR(95% CI)	AOR(95% C.I)
Alcohol users				
No	174(32.2)	367(67.8)	1.00	1.00
Yes	47(44.0)	60(56.0)	1.65(1.08-2.52)	3.29(1.86-5.81)*
Family history of mental illness				
Yes	101(59.8)	68(40.2)	4.44(3.06-6.43)	3.61(2.27-5.75)*
No	120(25.0)	359(75.0)	1.00	1.00
History of chronic illness				
Yes	129(60.8)	83(39.2)	5.81(4.05-8.32)	3.84(2.38-6.20)*
No	92(21.0)	344(79.0)	1.00	1.00
History of violence				
Yes	47(56.3)	47(43.7)	2.24(1.44-3.48)	1.59(0.87-2.91)
No	174(32.3)	380(67.7)	1.00	1.00
History of accident				
Yes	27(50.0)	21(50.0)	2.69(1.48-3.88)	5.06(2.43-10.51)*
No	194(31.4)	406(68.6)	1.00	1.00

Note: 100=Reference

7. Discussion

The prevalence of CMDs in this study was 34.1 % (95% CI=30.0%-38.0%). Regarding to the factors positively associated with it was female sex, marital status of divorced and widowed, unable to read and write, family history of mental illness, presence of one or more chronic illness, history of accident and alcohol users.

The prevalence of this study was similar with study conducted in Amhara region ,Southwest Ethiopia ,India and Brazil which was used similar screening tool (10, 13, 22, 25) and Brazil and India(34, 38). On the other hand, the prevalence of this study is slightly less than the study conducted in Southeast Ethiopia in which the prevalence of CMDs was 38.3% (20).The reasons could be the previous study was done in institution based and cut-off point of ≥ 7 of SRQ-20 items.. While, in this study conducted in community based and cut-off point's ≥ 8 of SRQ-20 items. The prevalence of current study was found to be higher from similar community based studies in Eastern Ethiopia and Kenya with prevalence of CMDs were 14.9% and 10.3% (11, 40). This difference might be due to difference in data collection tools such as in Kenya, author used clinical interview schedule, Revised (CIS-R) tool or due to difference targeted areas that was in eastern Ethiopia study done 50% in urban and 50% in rural community. While in this study 92% of respondents were urban dwellers.

This study showed that, the odds of developing CMDs were 1.8 times higher in female than male. This finding was similar with different study finding in different areas of Ethiopia (10, 13, 18, 19, 22, 24, 30, 42) and Kenya and India (37, 40). The elevated risk for CMDs might be partner who did not help with the care of child, polygamous relationship and verbal and physical abuse by partner (58).Other studies conducted in Eastern Ethiopia and Brazil revealed that, there was not gender difference (11, 43, 44).This study showed that, the odds of developing CMDs 3 times higher in unable to read and write than college and above. This study is in agreement with study done in Ethiopia(10, 13, 19). But studies conducted in Ethiopia revealed that, educational status was not statistically associated with CMDs (11, 18, 41).

Regarding to marital status, widowed and divorced were statistically significant associated with CMDs. Respondents who widowed were higher risk of developing CMDs. This is in line with study results in Ethiopia (10, 19),Kenya and India (38, 40). This might be due to adverse life events of losing some one. In contrary this study, study done in Jimma town and Addis Abeba among asthmatic patient indicated that, widowed was not associated with CMDs(10, 44). In our study showed that, respondent who divorced were statistically significant associated with CMDs. This finding is in agreement with study done in Kenya (40). This might be due to adverse life events of losing some one. But other studies, conducted in Ethiopia and Tanzania showed that, marital status

were not statistically significant associated with common mental disorders (10, 17, 18, 41) and Tanzania (39).

Those who drank alcohol had 3.3 times risk of developing CMDs than none drinkers. This reason could be, substance abuse was the diagnostic criteria for major depression disorders. This finding was in agreement with other study results from Ethiopia (17, 19, 21, 22). In contrast to this study, the studies conducted from Ethiopia revealed that, alcohol users were not statistically significant association with common mental disorders (10, 11, 13).

This study result revealed that family history of mental illness was significantly associated with CMDs. This finding was in agreement with other study done from Ethiopia (12, 13, 15-17, 41) and Tanzania (39). This could be explained by genetic predisposition and living condition. In contrast to this study, study done in Eastern and southwest Ethiopia family history mental illness was not associated with CMDs (11, 22, 24).

Living with one or more chronic medical illness was significantly associated with risk of developing CMDs. The finding of this study is in line with studies conducted in Ethiopia (10-13, 18, 23, 24, 41, 48), Brazil and India (34, 37). The reason might be those living with chronic physical illness might have limited activity and experience dissatisfaction in life. In contrast to this study, studies done in Ethiopia showed that, living with chronic illness was not statistically significant with CMDs (16, 17). This study result indicated that, history of accident was statistically significant associated with CMDs. This result is in agreement with studies done in Europe and Uganda (49, 50). It might be stress due to accidents.

Present study indicated that, age was not statistically significant associated with CMDs. This study is in line with studies conducted in Ethiopia (13, 14, 16, 19, 24) and South Africa, Tanzania and Brazil among teacher (39, 43, 45). However, studies conducted in Ethiopia and India indicated that, age was statistically significant associated with CMDs (10, 11, 18, 37, 40).

In present study income was no statistically significant associated with CMDs. This study is in agreement with studies conducted in Ethiopia (10, 17, 41). However, studies conducted in Ethiopia revealed that, income was statistically significant associated with CMDs (11, 16, 19) and Tanzania (39).

In our study occupational status was not statistically significant associated with CMDs. This study is in line with study conducted in Ethiopia (11, 13, 41). However, study done in Ethiopia showed that, occupational status was significant associated with CMDs (10, 40, 47).

8. Limitation of the study

Limitation

Social desirability bias due to the nature of measurement tool and recall bias.

9. Conclusion

The result of current study revealed a high prevalence of CMDs among adult in Bahir Dar City Administration. Being female, widowed, divorced, unable to read and write, alcohol users, family history of mental illness, presence of one or more chronic illness and history of accident are risk factors for development of common mental disorders.

10. Recommendation

For Ministry of Health

- Tax increment for alcohol sale shall be implemented by the government to minimizing behavior of alcohol drinking in the community.
- Ministry of health should be design multi-sectorial approach.
- None communicable disease program should make immediate efforts to provide common mental disorders care as a part of a holistic care.
- Physicians in charge of none communicable clinics need to be trained to identify CMDs, and take appropriate action.
- Adult education shall be strengthening.

For Health Department

- Health department should create awareness for community about the effect of psychoactive substance like alcohol on common mental disorders.
- Mental health services have to be expanding to the community with mental health training about contributing factors of common mental disorders for primary health care workers including urban and rural health extension workers. These have direct contact to community.
- Prevention of accident shall be enhanced at individual, community and government level.

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12. Appendixes

Appendix-1 Information sheet and consent form

Greeting

Good morning/Good afternoon

My name is _____. I will be the member of the team for the study conducted in this area under Bahir Dar University College of Medicine and Health Sciences and School of Public Health, Department of Epidemiology & Biostatistics. This study focuses to assess the prevalence of common mental disorders and associated factors among 18 years and above aged people in Bahir Dar City Administration. The finding of this study will be provided the community by giving evidence based information about contributing factors of common mental disorders to control the disease. You are selected to participate in this study which is designed by investigator, because you fulfill the requirements to be a sample.

The data that we will be obtained in this interview will be used only for research purpose. Your response will be kept confidentially. For this purpose your name will not be written here & there is no way of linking to your responses to the final result of the study findings. The study has no risk to you and your family except spending a maximum of 20 minutes' of your time & if you will be faces any difficulties in relation to the research you can contact responsible person based on the address below. You have the right not to respond at all or to stop in the meantime, but your participation is highly valuable for the success of this research objectives. Therefore, we politely request your cooperation to participate in this interview.

Do you agree to participate in this study? Yes continue _____ No _____

Thank you for being volunteer to participate in the study.

Name of data collector _____ Signature _____

Name of supervisor _____ Signature _____

Appendix- II English Questionnaires

Questionnaire code _____

Part 1: Demographic and Socio-economic factors

S.No	Questions	Response & coding
101	Sex of respondent	1. Male 2. Female
102	Age of respondent	-----
103	Religion	Orthodox Muslim Protestant Other
104	Marital status	Married Divorced Widowed Not married
105	Resident	Urban Rural
106	Educational level	Not able to read & write Only able to read & write Primary school(1-8 grade) Secondary school College & above
107	Occupation	Farmer Unemployed Self employed Employed Student
108	Family monthly income	-----
109	Family size	-----

Part 2. Questionnaire to assess the prevalence of common mental disorder (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 the question applies to you and you had the described problem in the last 30 days, answer **YES**. On the other hand, if the question does not apply to you and you did not have the problem in the last 30 days, answer **NO**. We would like to reassure you that the answers you are going to provide here are confidential

S.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, anger 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 decision	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

Part 3. Behavioral factors

3.1 CAGE Questionnaire for screening for Alcohol consume (Yes/No)

S.No	Screening questionnaire	Yes	No
301.1	Have you ever felt that ought to cut down on your drinking?	1	0
301.2	Have you ever felt bad or Guilty about your drinking?	1	0
301.3	Have people annoyed you by criticizing your drinking?	1	0
301.4	Have you ever had a drink first thing in the morning to steady your nerves or rid of a hangover (Eye opener)?	1	0

3.2. Smoking, Chat chewing and Substance Involvement Screening Test (ASSIST version 3.1

The following questions ask about your experience of using alcohol, tobacco products and chat across your lifetime and in the past three months. If you have taken these substances, please let me know. Please be assured that your responses will be treated as strictly confidential.

Definitions of terms that show frequency for questions 2-5

- ***Never***- means that the substance has not been used at all in the last 3 months (i.e. score = 0).
- ***Once or twice***- means that the substance has been used a total of 1 to 2 times in the last 3 months (i.e. score = 2).
- ***Monthly***- means the substance has been used an average of 1 to 3 times per month in the last 3 months – resulting in a total of 3 to 9 times over the last 3 months (i.e. score = 3).
- ***Weekly***- means the substance has been used an average of 1 to 4 times per week in the last 3 months (i.e. score = 4).
- ***Daily or almost daily***-means the substance has been used an average of 5 to 7 days per week in the last three months (i.e. score= 6).

	Question 1: In your life, which of the following substances have you ever used?	Yes	No
A	Tobacco products (Shisha, cigarettes, chewing tobacco, cigars)	1	0
B	Chat chewing	1	0

If "No" to all items, stop interview. If "Yes" to any of these items, ask Question 2 for each substance ever used

	Question 2: In the past three months, how often have you used the substances you mentioned (tobacco, khat)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
A	Tobacco products (Shisha cigarettes, chewing tobacco, cigars)	0	2	3	4	6
B	Chat	0	2	3	4	6

*** If "Never" to all items in Question 2, skip to Question 6.**

***If any substances in Question 2 were used in the previous three months, continue with Questions 3, 4 & 5 for each substance used**

	Question 3: During the past three months, how often have you had a strong desire or urge to use (tobacco, khat)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
A	Tobacco products (Shisha, cigarettes, chewing tobacco, cigars)	0	3	4	5	6
B	Chat chewing	0	3	4	5	6

	Question 4: During the past three months, how often has your uses of (tobacco, khat) led to health, social, legal or financial problems?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
A	Tobacco products (Shisha, cigarettes, chewing tobacco, cigars)	0	4	5	6	7
B	Chat chewing	0	4	5	6	7

	Question 5: During the past three month, how often have you failed to do what was normally expected you because of your use of substance(tobacco, khat)	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
A	Tobacco products (Shisha, cigarettes, chewing tobacco, cigars)	0	5	6	7	8
B	Chat chewing	0	5	6	7	8

Note: Ask question 6 & 7 for all substance ever used

	Question 6: Has a friend or relative or anyone else ever expressed concern about your use of substance(tobacco, khat)	No, Never	Yes, In the past 3 months	Yes, But not In the past 3 months
A	Tobacco products (cigarettes, chewing tobacco, cigars)	0	6	3
B	Chat chewing	0	6	3

	Question 7: Have you ever tried and failed to control, cut down or stop using(tobacco, khat) but failed	No, Never	Yes, In the past 3 months	Yes, But not In the past 3 months
A	Tobacco products (cigarettes, chewing tobacco, cigars)	0	6	3
B	Chat chewing	0	6	3

Part 4. Medical History

S.No	Questions	Response & coding
401	Family history of mental illness (Multiple response)	None Mother/Father Sister/Brother Grandmother/father Sibling
402	History of chronic illness (Multiple response)	None Diabetes mellitus Asthmatic Hypertension HIV/AIDS Cancer Heart disease
403	History of accident within 6 month	Yes No

Part 5. Partner violence(HITS questionnaire)

S.No	Over the last 12 months, how often did your partner	Never	Rarely	Sometime s	Fairly Often	Frequentl y
501	Has your partner ever physically hurt you	1	2	3	4	5
502	Has your partner ever insulted you	1	2	3	4	5
503	Has your partner ever threatened to harm you	1	2	3	4	5
504	Has your partner ever screamed or cursed at you	1	2	3	4	5

Appendix-III Amharic Version Information Sheet & Consent Form

ጤና ይስጥልኝ

ስሜ----- ይባላል። ወደ እርስዎ የመጣሁት የፊልድ ኢ.ፒ.ዲ.ሚ.የሎጅ ሁለተኛ ዲግሪ በባህርዳር ዩኒቨርሲቲ ህክምና እና ጤና ሳይንስ ኮሌጅ ስር በሚካሄደው ጥናት የመረጃ ስብሰባ አባል በመሆን ነው። የዚህ ጥናት መጠይቅ የሚያተኩረው በአማራ ክልል በባህርዳር ከተማ ስር በሚገኙ ቀበሌዎች እድሜያቸው 18 አመትና በላይ ባሉ የህብረተሰብ ክፍሎች ያለውን የተለመደ የአእምሮ ጤና ችግር መጠንና አጋላጭ ሁኔታዎችን ለመለየት የተዘጋጀ ሲሆን እርስዎ ለጥናቱ የሚያስፈልጉ መስፈርቶችን አሟልተው በመገኘትዎ የጥናቱ አባል አድርገንዎታል።

በመሆኑም ይህ መጠይቅ ሲዘጋጅ ተገቢ የሆኑ መረጃዎችን ለማግኘት ሲሆን ከእርስዎ የሚገኘው መረጃ ለጥናትና ምርምር ተግባር ብቻ የሚውል ነው። ከእርስዎ የሚገኙት ምላሾች ሚስጥራዊነታቸው የተጠበቁ መሆናቸውን እየገለጽኩ ለዚህም ዓላማ ሲባል የእርስዎ ስም በመጠይቁ ላይ የማይጻፍና የጥናቱ የመጨረሻ ውጤት የግል ማንነት ጋር የማይገናኝ መሆኑን ከወዲሁ አረጋግጣለሁ። ከዚህ በተጨማሪ ይህ መጠይቅ ከ20 ደቂቃ ያልበለጠ ጊዜ ከመሻማት ውጭ ምንም ዓይነት ጉዳት የማያደርስ ሲሆን ከጥናቱ ጋር በተያያዘ ለሚከሰቱ ማንኛውም ጉዳዮች ከዚህ በታች በተቀመጠው አድራሻ ሊያገኙን የሚችሉ መሆኑን እያስገነዘብኩ በጥናቱ ላይ ያለመሳተፍና የማቋረጥ መብትዎ የተጠበቀ ነው።

የእርስዎ መሳተፍ ግን ከምንም በላይ ለጥናቱ ዓላማ መሳካት ወሳኝ በመሆኑ በመጠይቁ እንዲተባበሩኝ ስል በታላቅ አክብሮትና ትህትና እጠይቃለሁ።

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት? አዎ/አይደለሁም

የመረጃ ስብሰባው ስም----- ፊርማ-----

የተቆጣጣሪው ስም----- ፊርማ-----

Appendix-IV Amharic Questionnaires

የመጠይቁ ኮድ-----

ክፍል-1 ማህበራዊና ኢኮኖሚያዊ ሁኔታዎችን በተመለከተ

ተ.ቁ	ጥያቄዎች	ምላሽና ኮድ
101	የተጠያቂው ጾታ	1 ወንድ 2 ሴት
102	እድሜህ/ሽ ስንት ነው	-----
103	ሐይማኖትህ/ሽ ምንድን ነው	1 ኦርቶዶክስ 2 እስልምና 3 ፕሮቴስታንት 4 ሌላ-----
104	የጋብቻህ/ሽ ሁኔታ	1 ያገባ 2 የፈታ 3 የሞተበት 4 ያላገባ
105	የተጠያቂው መኖሪያ ቦታ	1 ገጠር 2 ከተማ
106	የትምህርት ደረጃህ/ሽ ምንድን ነው	1 መጻፍና ማንበብ የማይችል 2 ማንበብና መጻፍ ብቻ የሚችል 3 የመጀመሪያ ደረጃ ት/የተማሪ 4 ሁለተኛ ደረጃ የተማሪ 5 ኮሌጅና ከዚያ በላይ የተማሪ
106	ስራህ/ሽ ምንድን ነው	1 ገበሬ 2 ስራ የለለው 3 የግል ስራተኛ 4 ተቀጣሪ 5 ተማሪ
107	የቤተሰብዎ አማካኝ የወር ገቢ	-----
108	የቤተሰብ ብዛት	-----

ክፍል -2 የተለመደ የአእምሮ ጤና ችግር መጠንን ለመገመት የተዘጋጀ መጠይቅ

ከዚህ በታች ያሉ መጠይቆች ባለፉት 30 ቀናት ውስጥ ጥቂት ህመምና ችግሮች ጋር የተቆራኙ ክስተቶች ከነበረብዎት አዎ ይበሉ። ይህ ክስተት ካልነበረብዎት የለም ይበሉ።

ተ.ቁ	በአለፈው አራት ሳምንት የጤና ችግር	አዎ	የለም
201	አንዳንድ ቀን እራስ ምታት ይሰማሃል/ሽ	1	0
202	የምግብ ፍላጎት/ህ/ሽ ቀንሷል	1	0
203	እንቅልፍህ/ሽ ጥሩ አይደለም	1	0
204	በቀላሉ ትፈራለህ/ሽ	1	0
205	እጅህ /ሽ ይንቀጠቀጣል	1	0
206	ትብሳጫለህ/ሽ፣ ትናደዳለህ/ሽ ወይም ትጨነቃለህ/ሽ	1	0
207	ምግብ ቶሎ አይፈጭልህም/ሽም	1	0
208	ሃስብህ/ሽ ይዘበራረቃል	1	0
209	ደስተኛ አይደለህም/ሽም	1	0
210	ከበፊቱ የበለጠ ማልቀስ ታብሃለህ/ሽ	1	0
211	የዕለት ተዕለት ስራ ማከናወን ይከብድሃል/ሻል	1	0
212	ውሳኔ መወሰን ያቅትሃል/ሻል	1	0
213	ስራህ /ሽ ከባድ ነው	1	0
214	በህይወትህ /ሽ ውስጥ አስፈላጊ ነገር ማከናወን ያቅትሃል/ሻል	1	0
215	ለነገሮች ፍላጎት ማጣት አለ	1	0
216	የምልረባ ሰው ነኝ ብሎ ማሰብ አለ	1	0
217	ራስን የማጥፋት ስሜት ይሰማሃል/ሻል	1	0
218	የድካም ስሜት አለ	1	0
219	ማቅለሽለሽ ማስመለስ የሆድ ህመም አለ	1	0
220	በቀላሉ ትደክማለህ/ሽ	1	0

ክፍል 3: ባህሪያትን በተመለከተ

3.1 አልኮልን በተመለከተ

ተ.ቁ	መለያ ጥያቄ	አዎ	የለም
301.1	አልኮል መጠጣት ለማቆም አስብህ/ሽ ታወቃለህ/ሽ	1	0
301.2	ሲጋራ በማጨስህ/ሽ ከስዎች ወቀሳ ሲቀርብህ/ሽ ተናደህ/ሽ ታወቃለህ/ሽ	1	0
301.3	በመጠጣትህ/ሽ የጥፋተኝነት ስሜት ተሰምቶህ/ሽ የወቃል	1	0
301.4	ጧት ስትነሳ/ሽ እንደ ማነቃቂያነት ተጠቅመህበት/ተጠቅመሽበት ታወቃለህ/ሽ	1	0

3.2: የዕጽ አጠቃቀም መለኪያ

መመሪያ:- የሚከተለውን ለተሳታፊዎች አንብብላቸው

የሚከተሉት ጥያቄዎች በህይወት ዘመንዎና ባለፉት ሦስት ወራት ውስጥ ትንባሆ እና ጫት መጠቀምን በሚመለከለት የራስዎን ልምድ የሚጠይቁ ናቸው። እነዚህን ነገሮች ተጠቅመው ከሆነ እባክዎ ይንገሩኝ።

2-5 ላሉት ጥያቄዎች ድግግሞሽን የሚያመለክቱ ቃላት ትርጉም (ትርጉሙን ለተሳታፊ አታንብብ) አንተ ግን በቃልህ ያዝ።

አንድ ጊዜ ወይም ሁለት ጊዜ:-ማለት ባለፉት ሶስት ወራት ውስጥ በአጠቃላይ 1 እስከ 2 ጊዜ ትንባሆ እና ጫት ተጠቅመዋል ማለት ነው (ከሆነ 2 ነጥብ ስጥ)።

በየወሩ:- ማለት ባለፉት ሶስት ወራት ውስጥ ዕጹን በየወሩ በአማካይ ከ1-3 ጊዜ ተጠቅመዋል። በድምሩም በሶስት ወራት ውስጥ ከ3-9 ጊዜ ተጠቅመዋል ማለት ነው (ከሆነ 3 ነጥብ ስጥ)።

በየሳምንቱ:- ማለት ባለፉት ሶስት ወራት ውስጥ ዕጹን በሳምንት በአማካይ ከ1-4 ጊዜ ተጠቅመዋል ማለት ነው (ከሆነ 4 ነጥብ ስጥ)።

በየቀኑ ወይም ከሞላ ጎደል በየቀኑ:- ማለት ባለፉት ሶስት ወራት ውስጥ በሳምንት ዕጹን በአማካይ ከ5-7 ቀናት ተጠቅመዋል ማለት ነው (ከሆነ 6 ነጥብ ስጥ)።

ማስታወሻ:- እባክዎ ከተሰጡት አማራጮች ያክብቡ ወይም ተጨማሪ ሀሳብ ካለዎት ይጻፉ

ተ.ቁ	ጥያቄ 1:-ከሚከተሉት ውስጥ በህይወት ዘመንዎ የትኛውን ንጥረ ነገር ተጠቅመዋል?	አልተጠቀምኩም	ተጠቅሜያለሁ
1	የትምባሆ ምርቶች /ሺሻ፣ ሲጋራ፣ የሚታኘክ ትመባሆ፣ ኮሽ	0	1
2	ጫት መቃም	0	1

ማሳሰቢያ:- የሁሉም ጥያቄዎች መልስ አልተጠቀምኩም ከሆን ቃለ መጠይቁን እዚህ አቁም። ለአንድ ወይም ከዚያ በላይ ጥያቄ ተጠቅሜያለሁ የሚል መልስ ከተሰጠ ተጠያቂው ለተጠቀማቸው ነገሮች ሁሉ ጥያቄ ሁለትን ጠይቅ።

ተ.ቁ	ጥያቄ 2:-ባለፉት 3 ወራት ውስጥ ከላይ ተጠቅሜ አውቃለሁ ያሉዋቸውን ነገሮች (ሲጋራ፣ ጫት) በየስንት ጊዜው ተጠቅመዋል?	በጭራሽ	አንድ ወይም ሁለት ጊዜ	በየ ወሩ	በየ ሳምንቱ	በየ ቀኑ (ከሞላ ጎደል በየቀኑ)
1	የትምባሆ ምርቶች/ሺሻ፣ ሲጋራ፣ የሚታኘክ ትመባሆ፣ ኮሽ	0	2	3	4	6
2	ጫት መቃም	0	2	3	4	6

ማሳሰቢያ:- በጥያቄ ቁጥር ሁለት ስር ለተዘረዘሩት ነገሮች ለሁሉም የተሰጠው መልስ “አይደለም” ከሆነ ወደ ጥያቄ ቁጥር 6 እለፍ። በጥያቄ ቁጥር ሁለት ስር ከተዘረዘሩት ነገሮች ተጠያቂው ባለፉት ሶስት ወራት አንዱን ተጠቅሞ ከነበር ለእያንዳንዱ ለተጠቀመው ነገር ጥያቄ ቁጥር 3,4 እና 5ን ጠይቅ።

ተ.ቁ	ጥያቄ 3:-ባለፉት 3 ወራት ውስጥ አነዚህን ነገሮች (ሲጋራ፣ ጫት) ለመጠቀም በየስንት ጊዜው ያሰኘዎት እና ስሜትዎ ያስገድደዎት ነበር?	በጭራሽ	አንድ ወይም ሁለት ጊዜ	በየ ወሩ	በየ ሳምንቱ	በየ ቀኑ (ከሞላ ጎደል በየቀኑ)
1	የትምባሆ ምርቶች/ሺሻ፣ ሲጋራ፣ የሚታኘክ ትመባሆ፣ ኮሽ	0	3	4	5	6
2	ጫት መቃም	0	3	4	5	6

ተ.ቁ	ጥያቄ 4:-ባለፉት 3 ወራት ውስጥ እነዚህን ነገሮች (ሲጋራ፣ ጫት) በመጠቀምዎ በየስንት ጊዜው የጤና፣ የማሕበራዊ፣ የሕግ መተላለፍ ወይም የገንዘብ ችግር አጋጠመዎት?	በጭራሽ	አንድ ወይም ሁለት ጊዜ	በየ ወሩ	በየ ሳምንቱ	በየ ቀኑ (ከሞላ ጎደል በየቀኑ)
1	የትምባሆ ምርቶች/ሺሻ፣ ሲጋራ፣ የሚታኘክ ትመባሆ፣ ኮሽ	0	4	5	6	7
2	ጫት መቃም	0	4	5	6	7

ተ.ቁ	ጥያቄ 5:-ባለፉት 3 ወራት ውስጥ እነዚህን ነገሮች (ሲጋራ፣ ጫት) በመጠቀምዎ ምክንያት በየስንት ጊዜው የሚጠበቅበዎትን ተግባራት ማከናዎን ሳይችሉ ቀሩ	በጭራሽ	አንድ ወይም ሁለት ጊዜ	በየ ወሩ	በየ ሳምንቱ	በየ ቀኑ (ከሞላ ጎደል በየቀኑ)
1	የትምባሆ ምርቶች/ሺሻ፣ ሲጋራ፣ የሚታኘክ ትመባሆ፣ ኮሽ	0	4	5	6	7
2	ጫት መቃም	0	4	5	6	7

1	የትምህርትምርቶች/ሺሻ፣ ሲጋራ፣ የሚታኘክ ትመባሆ፣ ኮሽ	0	5	6	7	8
2	ጫት መቃም	0	5	6	7	8

ማሳሰቢያ፡-ጥያቄ ቁጥር 6 እና 7 ተጠያቂው በሂደት ዘመናቸው ለተጠቀማቸው ነገሮች ሁሉ ጠይቅ።

ተ.ቁ	ጥያቄ 6፡-ንደኛ፣ ዘመድ ወይም ሌላ ሰው የእርስዎ እነዚህን ነገሮች (ትመባሆ፣ አልኮል፣ ጫት) መጠቀም እንዳይሰጩ/እንዳሳሰቡ/ገልጦልዎት ያወቃል?	በፍፁም የለም	አዎ፡ ባለፉት ሶስት ወራት	አዎ፡ ባለፉት ሶስት ወራት ግን አይደልም
1	የትምህርትምርቶች/ሺሻ፣ ሲጋራ፣ የሚታኘክ ትመባሆ፣ ኮሽ	0	6	3
2	ጫት መቃም	0	6	3

ተ.ቁ	ጥያቄ 7፡-አነዚህን ነገሮች (ትምህርት፣ ጫት) መጠቀምዎን ለመቀነስ ሞክረው አቅቶዎት ያወቃል?	በፍፁም የለም	አዎ፡ ባለፉት ሶስት ወራት	አዎ፡ ባለፉት ሶስት ወራት ግን አይደልም
1	የትምህርትምርቶች/ሺሻ፣ ሲጋራ፣ የሚታኘክ ትመባሆ፣ ኮሽ	0	6	3
2	ጫት መቃም	0	6	3

ክፍል 4: ህክምናን በተመለከተ

ተ.ቁ	ጥያቄዎች	መልስና ኮድ
401	በዘርዎ የአእምሮ በሽታ ህመም ያለበት አለ	1 የለም 2 እናት/አባት 3 እህት/ወንድም 4 ሴት/ ወንድ አያት 5 ልጅ
402	ለረጅም ጊዜ አብሮዎት የቆዩ በሽታ አለብህ/ሽ	የለም የስኳር በሽታ የደም ግፊት አስም ኤችአይቪ ካንሰር የልብ ህመም
403	ባለፈው ስድስት ወር አደጋ ደርሶብህ/ሽ ነበር	አዎ የለም

ክፍል 5: ጥቃትን በተመለከተ

ተ.ቁ	ጥያቄዎች	አያዉቅም	ብዙም ያልተለመደ	አልፎ አልፎ	በመጠኑ	በተደጋጋሚ
501	ጓደኛህ/ሽ አካላዊ ጥቃት አድርሶብህ/ሽ ያዉቃል	1	2	3	4	5
502	ጓደኛህ/ሽ ዘለፎህ/ሽ /ስድቦህ/ሽ ያዉቃል	1	2	3	4	5
503	ጓደኛህ አስፈራርቶህ/ሽ ያዉቃል	1	2	3	4	5
504	ጓደኛህ ጭሆብህ ያዉቃል	1	2	3	4	5

Appendix- V Student Declaration

I, the under signed, declared that this is my original work, has never been presented in this or any other University and that all the resources and materials used for the research, have been fully acknowledged.

Principal investigator

Name: Adamnesh Ambelie

Signature: _____

Date: _____

Advisors

Name: Kassawmar Angaw (Assistant professor)

Signature: _____

Date: _____

Name: Fentie Ambaw (PhD, Associate Professor)

Signature: _____

Date: _____