ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF ALLIED HEALTH SCIENCES

DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF PREVALENCE OF CIGARETTE SMOKING AND ASSOCIATED FACTORS AMONG PSYCHIATRIC OUTPATIENTS AT DESSIE REFERAL HOSPITAL, NORTHEAST ETHIOPIA.

BY: HABTAMU DAGNAW (BScN.)

A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCES SCHOOL OF ALLIED HEALTH SCIENCES DEPARTMENT OF NURSING AND MIDWIFERY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF SCIENCE IN ADULT HEALTH NURSING

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ADDIS ABABA, ETHIOPIA

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ABBREVIATIONS AND ACRONYMES

AUD- Alcohol Use Disorder

AUDIT- Alcohol Use Disorder Identification Test

CVD- Cardiovascular Diseases

DSM- Diagnostic Stastical Manual

DRH- Dessie Referral Hospital

GYTS- Global Youth Tobacco Survey

IRB- Institutional Review Board

OPD- Outpatient Department

SPSS- Statistical Package for Social Science

SW- South Wollo

WHO- World Health Organization

USA- United States of America

ABSTRACT

Background - Smoking is currently considered one of the leading problems in public health worldwide, and it is one of the most preventable causes of death. Cigarette consumption killed over 6 million people, nearly 80% in low and middle income countries in 2011. Smoking is prevalent in the general population even this may be increased in patients with mental condition. People with mental illness have high rates of morbidity and mortality from smoking related illnesses such as cardiovascular disease, respiratory diseases and cancer.

Objectives –The aim of the this study was to assess the prevalence of cigarette smoking and associated factors among psychiatric outpatients at Dessie referral hospital, Ethiopia march,2017.

Method – Institutional based cross sectional study was carried out in Dessie referral hospital psychiatric outpatients. The final calculated sample size was 281. A pretested questionnaire adapted from world health organization Global youth Tobacco survey was used assess the use of tobacco and associated factors and modified as appropriate to address the study objectives was used to assess alcohol use disorder in psychiatric patients. The study was conducted from march 1 - march 30, 2017.

Results: The prevalence of cigarette smoking among psychiatric outpatients was 25.6%. Among this the prevalence of cigarette smoking in persons with schizophrenia, bipolar I disorders, major depressive disorders and anxiety disorder were 10.75%, 8.1%,3.7% and 2.9%%, respectively. Cigarette smoking was strongly associated with male gender, being schizophrenic, and khat use.

Conclusion and recommendation:

The current prevalence of cigarette smoking was high amongst persons with mental disorders. Attention should be given routine screening for cigarette smoking in psychiatric patients and consequent management of smoking along with psychiatric management.

Key words: Smoking, mental health, determinants

1. INTRODCTION

1.1 Background

Tobacco smoking is the most common type of substance abuse compared to other substances. Tobacco smoking remains the most serious public health problem worldwide for several years Although its magnitude and relative impact vary among different populations, it is considered as the main preventable cause of death in a number of countries(1).

Tobacco contains nicotine, a highly addictive chemical which is rapidly absorbed into the bloodstream. Nicotine in turn stimulates dopamine production, a chemical associated with pleasurable feelings. When the nicotine content in their blood drops below a certain level, smokers begin to crave a cigarette. This craving causes a feeling of 'stress' and decreased satisfaction until the craving is relieved. The relief felt when this craving is finally satisfied is the feeling that smokers commonly mistake as 'relaxing'. For smokers with a mental condition, the association between smoking and feeling relaxed is more pronounced. It is mostly believed that people with a mental condition use cigarettes to self-medicate. Smokers with a mental condition are more heavily addicted to smoking; and the higher the number of cigarettes smoked per day, the greater the likelihood of causing a mental condition(2, 3).

Mental health conditions consists of a broad range of psychological conditions, with different symptoms, characterized by a combination of abnormal thoughts, emotions, behavior and relationships with others. The two principal diagnostic classifications used by mental health professionals are the World Health Organization's International Classification of Diseases (ICD-10)6 and the Diagnostic and Statistical Manual of Mental Disorders (DSM-4). The changes need to be bad enough to affect on the person's daily functions or to cause distress to them or other people(4).

Mental disorders are strongly related to cigarette smoking and smoking prevalence is three times higher in mentally ill and substance abusers as compared to the general population. Overall smoking prevalence among psychiatric patients is two to three times higher than among the general population, ranging from 40-50% among people with depressive and anxiety disorders and 70% or higher among patients with schizophrenia. People with mental health problems are even greater risk of smoking-related harm than the general population. Smoking also increases the risk of developing a mental health problem and is related with an increased prevalence of all mental health illnesses and higher suicide rates. It is not clear whether smoking is the cause or effect of mental illness. However, there is some researchers believing that smoking could act as a trigger for mental ill-health(5).

In the past, smoking was used as a positive reinforcement in the psychiatric inpatient units and has been integrated in the psychiatric culture. Nicotine increases alertness; elates mood; helps relaxation and stress; might have an anti-depressant effect, relieve boredom and provide a framework for those with few daily activities; and improve social interaction(6).

Although the prevalence of cigarette smoking and its associated factors have been studied many times in general populations and various areas of Ethiopia, there are very few studies on the prevalence of cigarette smoking and factors associated with it in psychiatric outpatients. Therefore, the aim of this study is to determine the prevalence of cigarette smoking and associated factors among psychiatric outpatients.

1.2 Statement of the problem

Tobacco use killed 100 million people in the 20th century and expected to kill about 1 billion people in 21st century if measures not undertaken(7). Smoking is the leading cause of preventable death, related with about 6 million deaths worldwide each year (8). Mentally ill persons are twice as likely to smoke, to smoke more heavily and become more nicotine-dependent than the general population. Thus Smoking rates are higher in individuals with severe mental illnesses such as schizophrenia and bipolar disorder, of whom between 30% and 70% respectively(9).

People with mental health conditions smoke significantly more and in turn have higher chance of nicotine dependency and are therefore at even greater risk of smoking-related harm. Studies which states on prevalence within individual mental conditions have found prevalence of around 60% in people with probable psychosis and up to 70% for people in psychiatric units(10).

A review of studies on cigarette smoking in Hawassa university reported that the prevalence ranges from 7.5 to 19.17% (11). Consequently, high rate of smoking is the leading cause of cancers mainly, lung, esophagus, and stomach cancers. As a result of smoking there is also smoke on the second hand causing on them cancers mainly lung cancers about 20-30 % occurring as a result of second hand smoke(12, 13).

People with mental illness have high rates of morbidity and mortality from smoking related illnesses such as cardiovascular disease, respiratory diseases and cancer(14).

The issue of smoking in mentally ill population is given little attention and largely ignored. According to researchers, biological and psychosocial factors reinforce tobacco use in this population(6). Therefore, the current study was aimed to determine the prevalence of cigarette use among psychiatric outpatients.

1.3 Significance of the Study

Smoking is a concern in people with mental illness as they are more likely to die from adverse effects of smoking than due to the mental condition. There is little studies on smoking and mental illness that provides an accurate statistics on the smoking in people with mental illness. In addition the prevalence of smoking in mentally ill populations is not considered as a serious problem as this may also have effect on the general population as a second hand smoke.

Even though the prevalence of cigarette use and its physiological, social and psychological effects have been studied in diverse populations and areas of Ethiopia, there is little known about the prevalence of cigarette use in psychiatric outpatients and inpatients in this population. Particularly there is no study focusing on cigarette use in psychiatric patients conducted in Dessie referral hospital.

The results of this study will help health professionals, hospital administrators and policy-makers as an input to reduce cigarette use among persons with mental illness by designing interventions like tobacco cessation programs, substitution of less addictive substances and counseling based on the study findings.

2. LITERATURE REVIEW

2.1 Prevalence of Cigarette smoking among psychiatric patients

Studies in many countries of the world repeatedly showed that prevalence of cigarette smoking among psychiatric populations is higher than among the general population. The prevalence of current smoking among people with mental illness is higher than in the general population in the USA (34.8% and 28.5%, respectively) (15), Canada (46.8% and 14%, respectively) (16), and Australia (31.2% and 18.7%, respectively) (17). A study in Australia showed that prevalence is higher among patients with severe mental illness than in people with general mental illness (51.2% and 26.4%, respectively),(17) while in Canada the prevalence of smoking was 51.8% in patients with schizophrenia compared to 39.2% among those with mood or anxiety disorder(16).

As the study from US in Tennessee medical university the prevalence of smoking among psychiatric patients showed that 42% are used cigarette(18). Another study in Australia showed that the current prevalence of smoking among those adults with a mental illness is estimated that 36.2% , almost double the 18.8% smoking prevalence among adults with no mental illness(19).

Studies from Yemen discovered that the prevalence of cigarette smoking was 24.3% (20). A study from similar continent in Bahrain also reported that the prevalence of smoking of tobacco among mentally ill patients was 30.2 %(21).

A research conducted in south Africa reported that majority of the participants 91.4% were identified as current smokers of whom (82%) indicated to smoking daily and the rest 18% less-than-daily(22). A study in Nigerian psychiatric outpatient the prevalence of tobacco use among those with mentally ill patients showed that 59%(23). In sub-Saharan Africa, higher rates of substance use have been reported among persons presenting for psychiatric evaluation in mental health facilities(24).For instance a recent study in Tanzania revealed that the prevalence rate of substance use in psychiatric patients may be as high as 68.5% (24).

A research conducted in Ethiopia, Jimma university teaching and referral hospital discovered that the prevalence of cigarette smoking among outpatient psychiatric patients was 20.5%(25).

Despite the prevalence of cigarette smoking and its physiological and psychosocial effects have been studied in various populations and areas of Ethiopia, there are very few studies on the prevalence of cigarette smoking and its determinants in psychiatric outpatients.

2.2. Factors associated with smoking in psychiatric patients

2.2.1 Socio demographic Factors

Tobacco smoking prevalence among mentally ill persons are strongly related with socio demographic factors particularly Age, gender, Lower economy, and Low education level(<8 years of schooling). A study in Brazil Smoking prevalence was significantly higher among unmarried male participants, aged 40 years and above, with a low education level (≤ 8 years of schooling) and a history of homelessness(26). A study in America and Australia reported that large increases in smoking rates increasing from 18% to 50% among people aged 18–44 years, to 17% to 42% for adults aged 45–64 years. Smaller changes were observed in adults aged 65 and over with the smoking rate of 14%(19). A study conducted in Bahrain the prevalence of smoking among men's was higher (47.7%). compared to 13.3% for women(21). A study in Nigeria also found male gender, unemployment, lower level of education and marital status (single) to be associated with smoking in psychiatric patients(23). A study conducted in Ethiopia reported that The frequency of cigarette smoking in males and females were 27.3 and 2.0%, respectively. In this study being male, increased frequency of going to worship place, increased educational status, being a government employee, being unmarried (single), and living alone, and family monthly income of 1201 ETB and higher were strongly and positively associated with current cigarette smoking in psychiatric patients (25).

2.2.2 Co morbid substance use

Mentally ill patients with substance use disorders smoke cigarettes more than adults without these disorders. Approximately 25% of adults in the USA have some form of co substance use disorder, and these adults consume almost 40% of all cigarettes smoked by adults(27).

An individual may use more than one substance. As smoking rates were so high among those with alcohol or drug disorder. Among those patients with co morbid substance use, the smoking rate is consistently high. People with substance use disorders with psychiatric problems have the highest rates of smoking, and those with anxiety and depressive disorders who have a co morbid substance use disorder also have very high smoking rates(19). Prevalence of current cigarette smoking reported that higher among individuals who used alcohol or illicit drugs(26). In Tanzania, family history of substance use is strongly associated with use of any psychoactive substance and alcohol use is significantly related to tobacco use(24). A study in Ethiopia showed that khat use, using shisha, family history of alcoholism, alcohol use disorders were strongly and positively associated with current cigarette smoking in psychiatric patients(25).

2.2.3 Cigarette smoking and Type of psychiatric disorder

A survey in USA Smoking Prevalence among patients with Mental Illnesses Compared to General Population reported that: Schizophrenia 59.1%, Bipolar Disorder 46.4 %, Psychological Distress 38.1%, Attention deficit disorder 37.2 %, Phobias or Fears 34.3 % and General Population 20.6 %(28). A study in USA smoking prevalence is higher among those patients with psychological distress and varied on the type of mental disorders. As reported from this study smoking prevalence among anxiety disorder is 37.8%, 45.1% in those with mood disorder(19).

A study in Australia reported that the prevalence of smoking is higher in patients with severe mental illness as compared to those with general mental illness 51.22%,26.4%, respectively(29). Another study in Australia the current frequency of cigarette smoking in schizophrenia ,bipolar disorder and depressive disorders were 70, 61 and 58% respectively(30). Another supportive study in Canada discovered that smoking prevalence of 51.8% among schizophrenia patient as compared to 39.2% among those with mood disorder or Anxiety(31).

A study done in South Africa reported as smoking prevalence among different psychiatric patients as, Schizophrenia 46.6%, Substance induced psychotic disorder 22.4%, Bipolar Disorder 12.1%(22).

A study in Ethiopia, Jimma teaching hospital With regard to mental disorders 16.3% of patients with major depressive disorders, 17.8% of patients with bipolar I disorders, 23.3% of patients with anxiety disorders, 28.2% of patients with schizophrenia and 20.8% of patients with other psychiatric disorders were smoking cigarettes(25).

2.3. Conceptual Framework

The model provides a framework for understanding the potential factors on an individual's tendency to smoke cigarette among psychiatric patients.

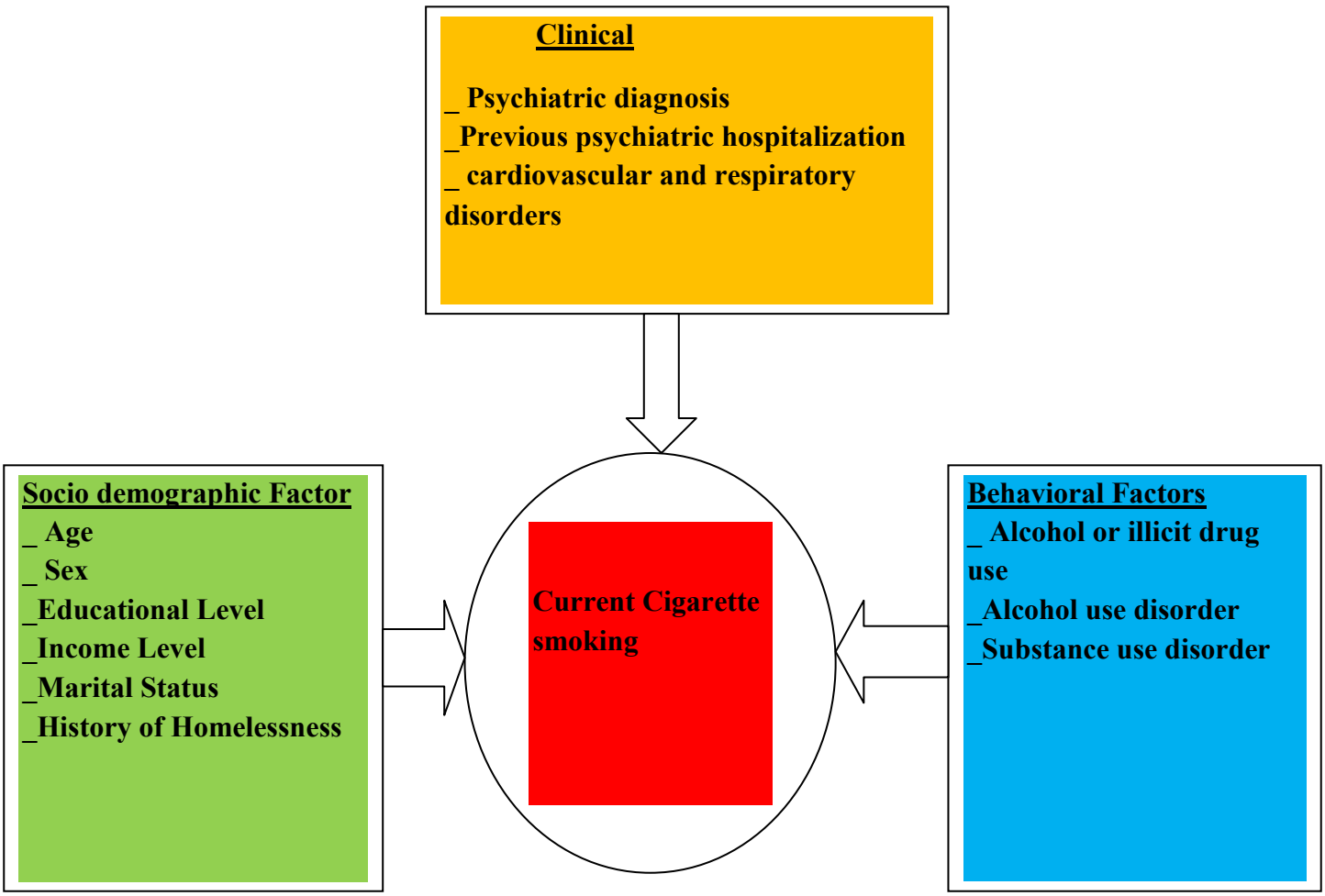

Figure 1: -Conceptual framework for factors affecting the use of cigarettes among psychiatric outpatients through reviewing different literatures.

3. OBJECTIVES

3.1 General Objective

To assess cigarette smoking prevalence and associated factors among psychiatric outpatients at Dessie referral hospital, Amhara regional state, North East of Ethiopia, 2017.

3.2 Specific Objective

i. To determine the prevalence of cigarette smoking among psychiatric outpatients.

ii. To identify factors associated with the use of cigarettes among psychiatric outpatients .

4. METHODS

4.1 Study Area and Study period

Dessie is capital town of South Wollo zone. The town is located about 400 km from Addis Ababa. This town is found at 2470 meter above sea level. Based on the 2007 national census conducted by the Central Statistical Agency of Ethiopia (CSA), Dessie woreda has a total population of 151,174, of whom 72,932 are men and 78,242 women; 120,095 or 79.44% are urban inhabitants living in the town of Dessie, the rest of the population is living at rural kebeles around Dessie(32). The town has 10 sub cities. Dessie referral hospital is the only hospital giving services and follow up for psychiatric patients .There is 3 psychiatric Outpatient department in the hospital giving this services. The study was conducted in psychiatric outpatient follow up units of Dessie referral hospital from March 1 to 30, 2017.

4.2 Study Design

An institution based cross-sectional study was carried out in patients with mental disorders.

4.3. Source Population

The source population for the study was all mentally ill patients in Dessie Referral hospital.

4.4. Study Population

The study population were all mentally ill patients participating in the study area getting service in psychiatric OPD of Dessie Referral hospital.

4.5. Inclusion and Exclusion Criteria

I. Inclusion Criteria

Patients above 18 years of age, able to respond, communicate and accept participating in the study were included.

II. Exclusion Criteria

Patients with mental retardation and those with difficulty in answering the interview questions were excluded.

4.6 Sample size determination and Sampling procedure

i. Sample size determination

Sample size was calculated by using single proportion formula. Thus overall minimum sample size was determined by using single proportion formula:

[n= Z2α/2 *(P (1-P)/d2]

Where

n=is minimum sample size required for the study,

z=standard normal distribution (z=1.96), with confidence interval of 95% and
α=0.05,
p=prevalence/population proportion (p=21%, a prevalence of cigarette smoking among psychiatric outpatients done in Jimma university teaching hospital,2016.)(25).
d=is a tolerable margin of error (d=0.05), then,

n= Z2 α/2 *p (1-p) d2 = (1.96) 2 * (0.21(1-0.21)/ (0.05)2 =254.8 = 255

Thus the total sample size (n) was 255.

Non response rate (10%)=255* (10/100)=25.5 ~ 26
summing these The total sample size was 281.

ii. Sampling procedure

Dessie Referral hospital was selected purposively as study site by considering there was outpatient follow-up of psychiatric patients and lack of previous researches related to use of cigarettes in mentally ill clients. The weekly patient load in the outpatient department of psychiatry clinic was 250. Therefore, to get the sample size of 281; we were need to collect the data for the duration of four weeks using systematic sampling method to select study subjects. The calculated sample interval was calculated as: K= N/n= 250*4/281= 3.55= 4

Therefore, the samples were selected every 4 patients from the follow up list. The total sample size was proportionally allocated into the three OPDs. After this, interviewing of the clients was carried out in patients. The overall sampling technique that was performed in the clinic was in the form of the following figure.

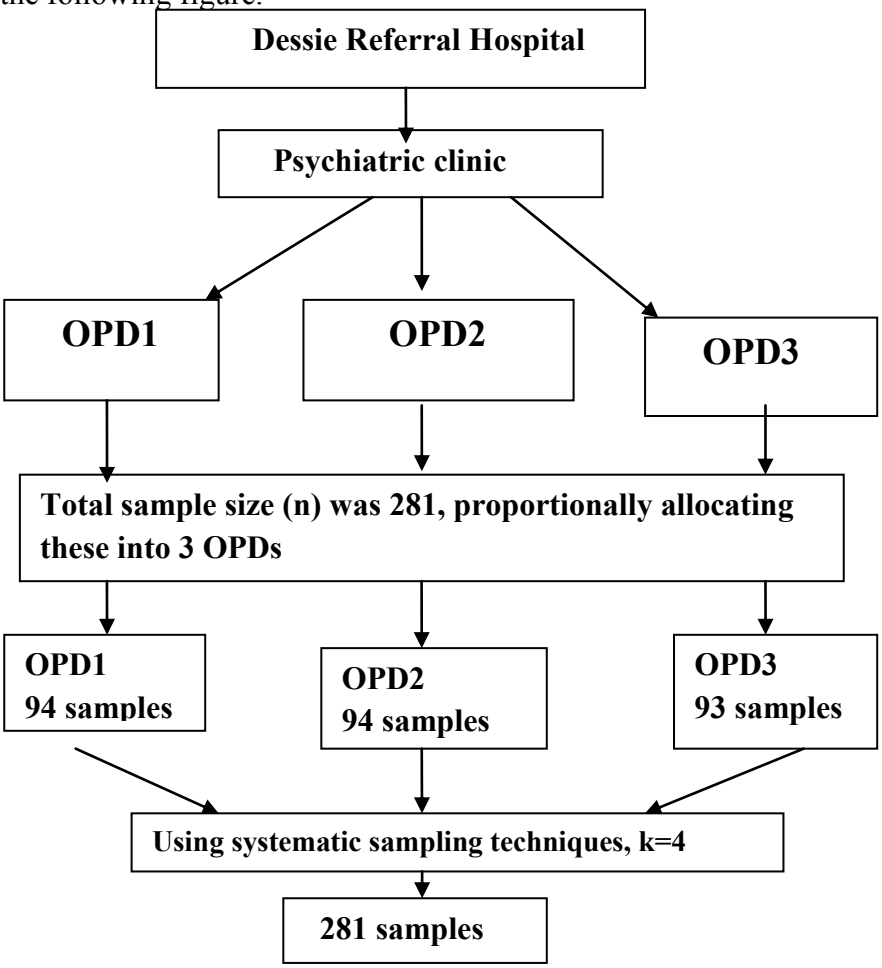

Figure 2: Sampling procedure for selecting study subjects in Dessie referral hospital, outpatient psychiatric unit, Amhara regional state, Ethiopia, March 2017

4.7. Study variables

i. Dependent variable

- ✓ Use of cigarette smoking

ii. Independent variable

- ✓ Sociodemographic factors(Age, sex, religion, Ethnicity, occupation, marital status, Monthly income, Level of education)
- ✓ Clinical factors (type of Psychiatric diagnosis) Behavioral Factors
- ✓ Behavioral factors (Alcohol use , Khat use, other Substance use)

4.8 Operational definitions

- ✓ **Cigarette smoking:** is defined as smoking all or part of a cigarette with the preceding of the interview.

4.9. Data collection techniques and procedures

i. Data collection techniques

After reviewing of the relevant literature, the questionnaire adapted from Global youth Tobacoo survey **(GYTS)** to assess the use of tobacco and associated factors and modified as appropriate to address the study objectives in psychiatric outpatients.

Finally, the instrument incorporated the following four parts:

Part one: socio demographic characteristics

Part two: use of cigarettes

Part three: use of Alcohol and other substances

Part four: type of psychiatric diagnosis

After adapting the final version of the questionnaire, face to face interview was conducted to collect data by using Amharic version questionnaire from March 1- 30, 2017.

ii. Data collection procedure

Data was collected by using face to face interview using Amharic version questionnaires. The investigator was responsible for the overall management of the project; the development of the final questionnaire; securing Participation of selected patients; identifying, training and assignment of data collectors and Supervisors. Three data collectors who are nurses & speak Amharic language was selected from Wollo University. The criteria that was used for the selection of data collectors are being nurses & diploma level, know the Amharic language, and good at nurse client communication. Both the interviewers & the supervisor were given one day (8 hours) training before actual field work about the aim of study, study procedure, & data collection techniques by the principal investigator.

4.10. Pretest

The pre test of the questionnaire was carried out in woldia hospital. A 5% sample from the total respondents were interviewed during the pretest. After this, the questionnaire was edited accordingly.

4.11. Data quality control

During data collection, data was checked for its completeness, and missing information at each points by both principal investigator and data collectors. For accurate collection of the data, data collectors were trained and follow up made. In addition, data was rechecked during data entry into the computer soft ware before analysis.

4.12. Data Analysis Procedure

Data was checked, cleaned and entered in to Epiinfo version 3.5 software, then imported to SPSS 20.0 software for analysis. Incomplete and inconsistent data was excluded from the analysis. Descriptive statistics was used to describe the sample. The results of the descriptive statistics was expressed as percentages and frequencies. Associations between independent and dependent variables were analyzed first using bivariate analysis. Those variables which were found to have an association with the outcome variable at $P<0.2$ entered to multivariate logistic regression to test for independent association. The magnitude of the association between the different independent variables in relation to dependent were measured using odds ratios and 95% confidence interval (CI).

4.13. Ethical considerations

Before the beginning of data collection, the principal investigator received paper of approval from Addis Ababa University, College of health sciences Institutional Review Board (IRB), and letter of permission from department of Nursing. After this, the letter was given to Dessie referral hospital medical director. Then, the Medical director wrote permission letter to concerned head staffs in psychiatric unit. Subject information sheet, which contains purpose of the research, procedures to be carried out, expected benefits of the study, compensation, and confidentiality of information, was explained to the participants. At the same time, it was made clear that participation is totally based on verbal consent form which contains willingness of the participants.

4.14. Utilization and dissemination of the study results

The final result of this research was presented to the community of department of nursing and midwifery of AAU. It was disseminated to the school library and respective hospitals. Finally, it will be published in peer reviewed journals for further utilization.

5. RESULT

1. Socio demographic Characteristics of Respondents

Out of 281 Psychiatric outpatients (≥18 years) participated in the study, 270 completed the interview making the response rate of 96%. Sixty (60.7%) (164), of the patients were male and thirty nine (39.3%) (106) were female. 239(88.5%) were Amhara ethnicity, 19(7.0%) Oromo ethinicty,7(2.6%) Afar and 5(1.9%) were tigrai ethnicity. Two hundred and ten (77.8%) were followers of Muslim religion followed by Orthodox Christian followers 53(19.6.5%), 6(2.2%) protestants, and 1(0.4%) catholic. The educational status of 53 (19.6%) of respondents were illiterates and 207(80.4%) were literates. On occupation, 93(34.4%) were employed and 177(65.6%) were unemployed. Marital status of respondents, 145(53.7%) were married, 100(37.0%) single, and 25(9.3%) divorced**. (Table 1)**

Table 1: The socio-demographic characteristics of psychiatric outpatients in Dessie referral hospital in 2017/18 (n=270)

Variables	Frequency (n=270)	percent
Respondents sex		
Male	164	60.7
Female	106	39.3
Respondents age		
18-28	116	43.0
29-39	66	24.4
40-50	40	14.8
51-61	48	17.8
Respondents ethnicity		
Amhara	239	88.5
Tigre	5	1.9
Afar	7	2.6
Oromo	19	7.0
Respondents religion		
Orthodox	53	19.6
Muslim	210	77.8
Protestant	6	2.2
Catholic	1	.4
Respondents occupation		
Employed	93	34.4
Unemployed	177	65.6
Respondents educational status		
Illiterate	53	19.6
Literate	207	80.4
Respondents marital status		
Married	145	53.7
Single	100	37.0
Divorced	25	9.3
Respondents monthly income		
<600	142	52.6
601-1200	76	28.1
1201-2000	44	16.3
>2000	8	3.0

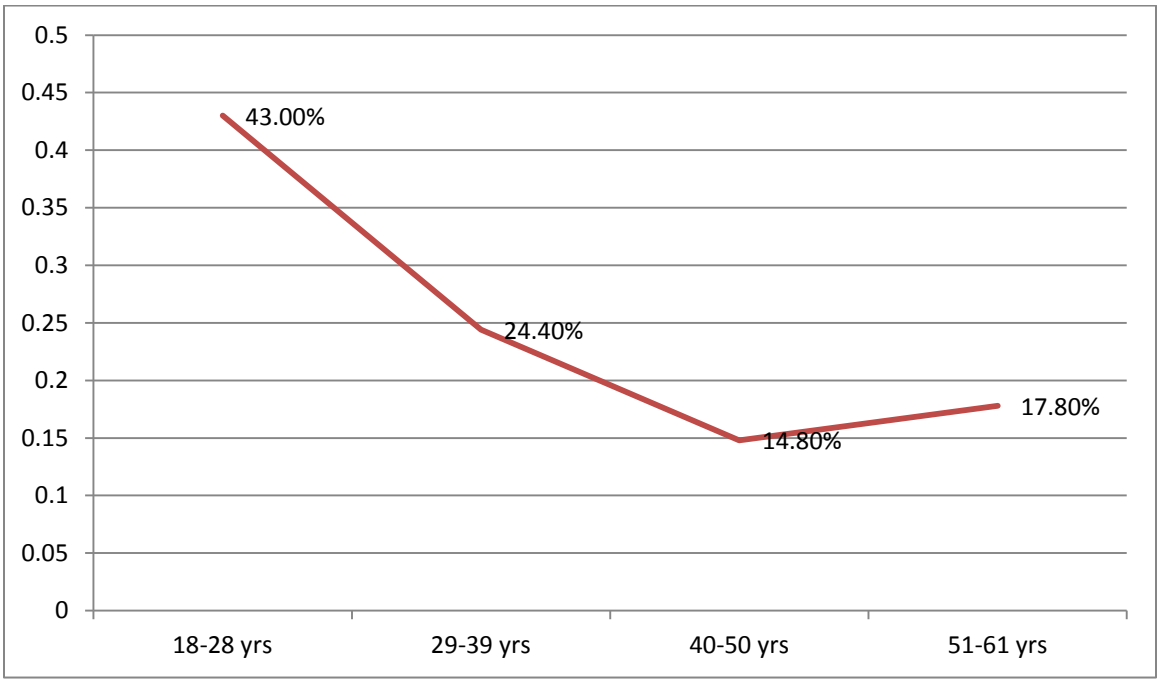

Figure 3: shows The distribution of age of psychiatric outpatients of Dessie referral hospital in years, March, 2017/18 (n=270)

The mean age of the respondents was 33 (SD± 11) years. 116(43.0%) were in the age ranges between 18 and 28 years, 66(24.4%) between 29-39 years, 40(14.8%) between 40-50 years,48(17.8%) were between 51and 61.

1. Behavioral and Clinical characteristics of Respondents in psychiatric clinic of Dessie Referal Hospital, 2017

Table 2 shows out of the total 270 respondents, 69 (25.6%) were cigarette smoker and 201(74.5%) were not smoke cigarettes for a similar amount of time. The frequency of patients with regard to alcohol intake history 87.4% of patients do not drink alcohol and 12.6% of patients drink alcohol.

Table 2: The characteristics of factors associated with cigarette smoking in Dessie referral hospital psychiatric outpatient in 2017/18 (n=270)

Variables	Frequency (n=270)	Percent
Respondent's history of cigarette smoking in past one month		
No	201	74.4
Yes	69	25.6
Respondents type of psychiatric disorder		
Anxiety	47	17.4
Depression	90	33.3
Bipolar	62	23.0
Schizophrenia	71	26.3
Respondents Alcohol intake history		
Yes	34	12.6
No	236	87.4
Respondents khat chewing history		
Yes	93	34.4
No	177	65.6
Respondents history of shiha smoke		
Yes	20	7.4
No	250	92.6

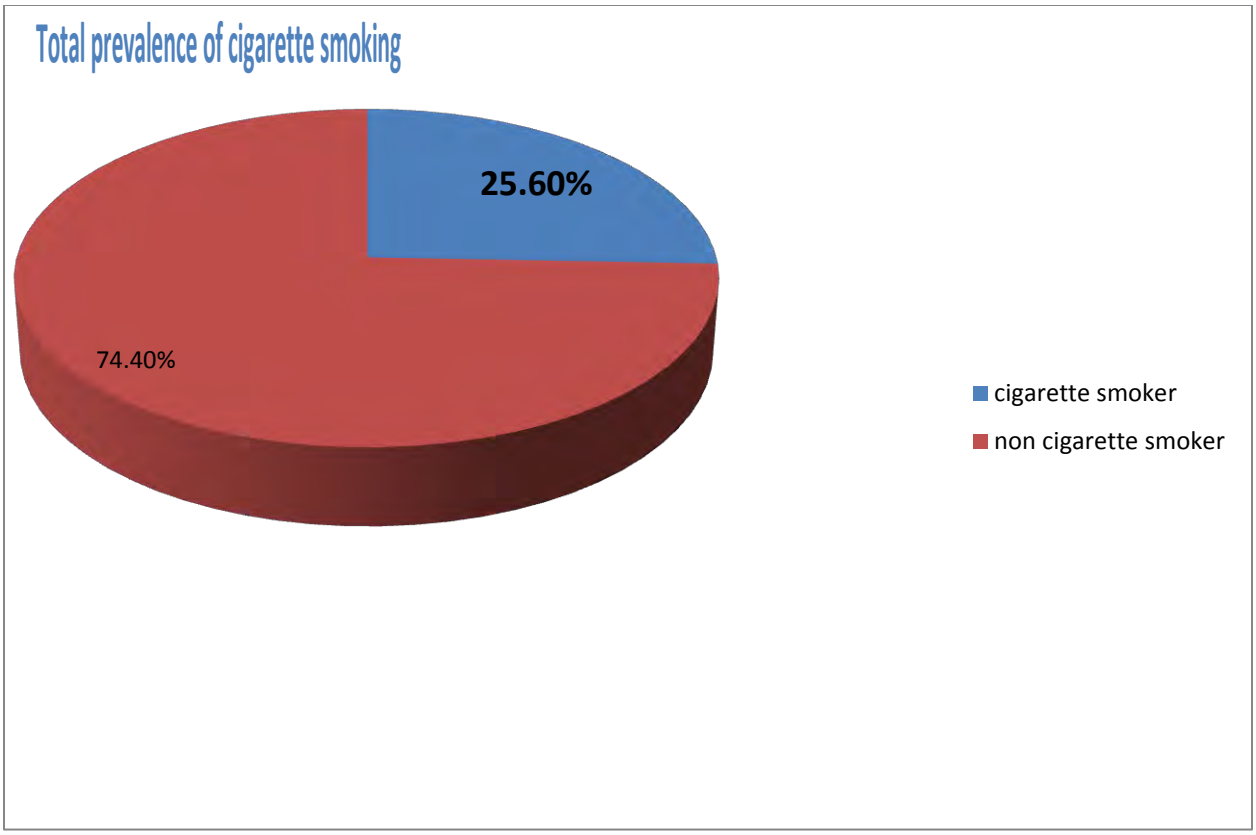

Figure 4: The prevalence of cigarette smoking among psychiatric outpatients at Dessie referral hospital, March, 2017/18 (n=270)

The figure above shows that out of total 270 participants 69(25.6%) were cigarette smoker whereas 201(74.4%) were not smoke cigarette. The overall current prevalence of cigarette smoking was 25.6% (95%CI, 20%-31%) (n=270).

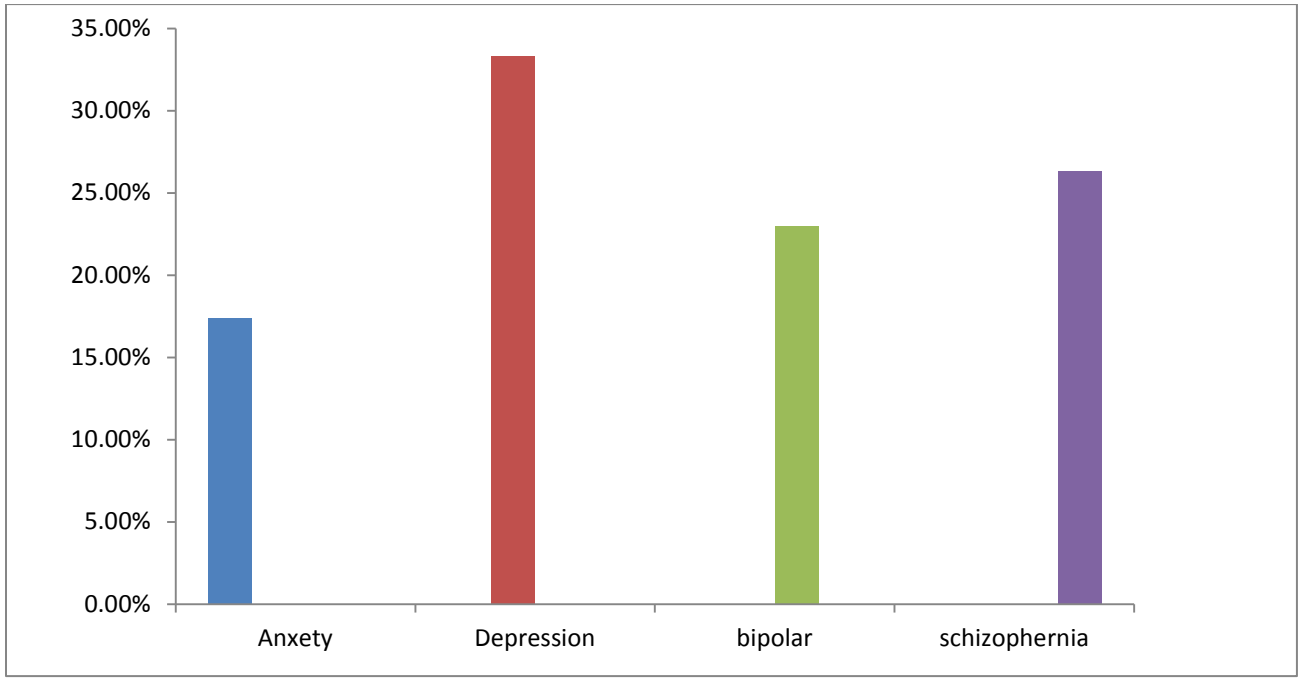

Figure 5: The classification of mental disorders by psychiatric diagnosis among psychiatric outpatients of Dessie referral hospital, March, 2017/18 (n=270)

The figure above (**Figure 5)** shows that 90(33.3%) of respondents were depressive, 71(26.3%) were schizophrenia, 62(23.0%) were bipolar disorder, 47(17.4%) were anxiety disorder.

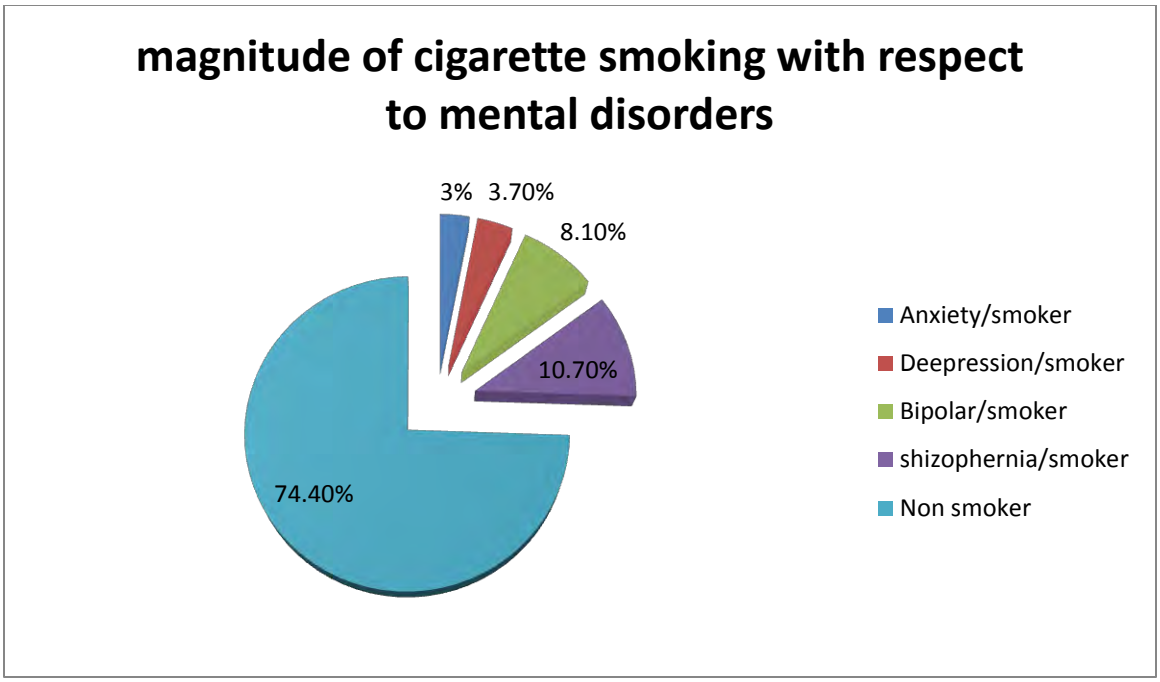

Figure 6: The magnitude of cigarette smoking respective to mental disorders among psychiatric outpatients of Dessie referral hospital, March, 2017/18 (n=270)

The figure above (**Figure 6)** shows that 3% of respondents with anxiety disorder, 3.7% with depression, 8.1% with bipolar disorder, and 10.7% with schizophrenia patients were cigarette smoker.

2. Factors Associated with Cigarette smoking in psychiatric clinic of Dessie Referal Hospital, 2017.

Table 3 shows the demographic, personal, social and behavioral factors associated with cigarette smoking. After controlling possible confounding effects of other covariates, sex, marital status, type of psychiatric disorder, Alcohol use, Khat use were found to be significantly associated with cigarette smoking. Male patients were 4 times more likely to smoke cigarettes as compared to female patients [AOR: 4.070, 95%CI: (1.726-9.596)]. This study revealed that being single were 3 times more likely to smoke cigarettes as compared to married patients [AOR: 2.694, 95%CI: (1.223-5.630)]. Schizophrenic patients were 4 times more likely to smoke cigarettes as compared to anxiety disorder [AOR: 3.943, 95%CI: (1.306, 11.905)]. Patients with alcohol use disorder were 4 times to smoke cigarettes as compared to those patients do not drunk alcohol,[AOR: 3.889, 95%CI: (1.496, 10.111)]. Patients who used khat were 6 times more likely to smoke cigarettes as Compared to non khat users,[AOR: 5.673, 95%CI: (2.774, 11.602)].

.

Table 3: Binary and multivariate analysis of factors in relation to cigarette smoking (n= 270)

Variables	Cigarette smoking(n=270)		OR (95%CI)	
	Yes (%)	No (%)	COR(95%CI)	AOR(95%CI)
Sex				
Male	59(85.5%)	105(52.2%)	5.394 (2.612-11.14)	**4.070(1.726-9.596)***
Female	10(14.5%)	96(47.8)	1.00	1.00
Age				
18-28	37(53.6%)	79(39.3%)	3.278(1.280-8.395)	2.464(0.763-7.963)
29-39	19(27.5%)	47(23.3%)	2.830(1.033-7.752)	2.712(0.751-9.788)
40-50	7(10.1%)	33(16.4%)	1.485(0.455-4.841)	1.633(0.389-6.857)
51-61	6(8.7%)	42(20.9%)	1.00	1.00
Marital status				
Single	39(56.5%)	61(30.3)	2.672(1.502-4.751)	**2.694(1.223-5.630)***
Divorced	2(2.9%)	23(11.4%)	0.363(0.081-1.633)	0.552(0.095-3.220)
Married	28(40.6%)	117(58.5%)	1.00	1.00
Alcohol intake				
Yes	20(29.0%)	14(7.0%)	5.452(2.570-11.564)	**3.889(1.496-10.111)***
No	49(71.0%)	187(93.0%)	1.00	1.00
Khat chewing				
Yes	48(69.6%)	45(22.4%)	7.924(4.302-14.593)	**5.673(2.774-11.602)****
No	21(30.4%)	156(77.6%)	1.00	1.00
Shisha smoke				
Yes	11(15.9%)	9(4.5%)	4.046(1.599-10.240)	2.098(0.657-6.693)
No	58(84.1%)	192(95.5%)	1.00	1.00
Type of psychiatric disorder				
Depression	10(14.5%)	80(39.8%)	0.609(0.223-1.665)	0.813(0.240-2.751)
Bipolar	22(31.9%)	40(19.9%)	2.681(1.067-6.739)	2.694(0.854-8.499)
Schizophrenia	29(42.0%)	42(20.9%)	3.366(1.374-8.245)	**3.943(1.306-11.905)***
Anxiety	8(11.6%)	39(19.4%)	1.00	1.00

- ***AOR= statistically significant at p< 0.05, **AOR= statistically significant at p< 0.001***

6. DISCUSION

In this study the prevalence of cigarettes smoking among mental ill patients in Dessie referral hospital psychiatric OPDs was 25.6%. Smoking has been associated with a range of mental disorders including schizophrenia, bipolar disorder and depression. People with mental illness have high rates of morbidity and mortality from smoking related illnesses such as cardiovascular disease, respiratory diseases and cancer. The prevalence of cigarette smoking among psychiatric populations is higher than among the general population(15).The higher prevalence of cigarettes smoking among mental ill patients reflect particular psycho-social stresses experienced by this group of patients. Several factors can explain the much higher prevalence of cigarettes smoking among mental ill patients in this study than in the general population. This may be due to chemical that find within cigarettes have psychoactive effect that lead relief of mental disorder symptom and used as self medication.

This study revealed that there is substantial burden of cigarette smoking in persons with mental disorders in Dessie Referral Hospital. The prevalence of cigarette smoking among mentally ill patients in this study, Dessie referral hospital, Ethiopia, was 25.6%. This figure shows cigarette smoking is still a major public health concern among Dessie referral hospital psychiatric outpatients. In addition, the finding of the study agreed with many previous studies on mentally ill patients conducted in Africa and some parts of Ethiopia. A study in many parts of the world reported the prevalence among mentally ill patients was USA (34.8%) (15), Canada (46.8%) (16), and Australia (31.2%) (17). The finding of this study is lower than these studies conducted in western world. This variation may be due to social and cultural differences between the continents.

The prevalence of cigarette smoking in this study area was 25.6%, which agrees with a study conducted in Yemen on mentally ill patients which was 24.3% (20) and with another study from similar continent in Bahrain also reported that the prevalence of smoking of tobacco among mentally ill patients was 30.2 %(21). This study is a much lower prevalence compared to A research conducted in south Africa reported that majority of the participants 91.4% were identified as current smokers(22). This difference may be the impact of cultural, socio demographic status of South Africa and Ethiopia.

In sub-Saharan Africa, higher rates of substance use particularly cigarette smoking were reported among persons with mental health problems in mental health facilities (24). The possible explanation for the observed differences in cigarette smoking could be due to social and demographic factors. Another possible reason for lower reported prevalence may be due to social desirability bias.

The current prevalence of cigarette smoking 25.6% is in agreement with the study conducted in Jimma University specialized hospital in which 20.5% of persons with mental disorders were found to be cigarettes smokers. However, the prevalence is higher as compared to that reported in studies carried out among the students of Hawassa University in Ethiopia which revealed 7.5% prevalence (11).

This study found out that males were more likely to smoke cigarettes as compared with female patients. Different studies were in line with this finding. For instance, A study conducted in Bahrain, Nigeria reported that being male were associated with cigarette smoking. A study in Jimma university specialized hospital also revealed that male patients were more likely to smoke cigarettes (25) which is in consistent with this study. The possible reason for the observed lower cigarette smoking prevalence among females is due to females were culturally discouraged to smoke cigarettes and cultural acceptance of male practicing cigarettes smoking.

Although causal relationships and biological mechanisms underlying associations of cigarette smoking with severe mental disorder have yet to be clearly established studies conducted in USA, Australia , South Africa and Ethiopia indicated severe mental disorder is significant predictors of cigarette smoking (19) (22). Similarly, this study finding indicated as schizophrenia patients are more likely to smoke cigarettes as compared to anxiety disorder. The observed higher prevalence of cigarette smoking among severe mental disorder patient might be due to cigarette contains psychoactive chemicals that leads to relief of severe mental disorder symptoms. On the other hand, other works in literature explained that cigarettes smoking and severe mental disorder show bidirectional relationship a cigarette smoking increases the risk of having severe mental disorder and persons with severe mental disorder tend to smoke cigarettes and have difficulties when they try to stop. There are thousands of chemicals are present cigarette, of which one or several may affect mood in the same way as a group of antidepressant medications called monoamine oxidase inhibitors or (MAOIs) does. These MAOIs effectively increase levels of specific neurotransmitters involved in the regulation of mood. Cigarettes smoking, therefore, may be one way for severe mental disorder individuals to alleviate symptoms

Consistently with study findings reported from Jimma university specialized hospital, In this study both alcohol use and Khat chewing had a significant relationship with cigarette smoking (22). The observed similar finding might be due to use of one substance also predispose the use of other substance, for e.g. Khat chewing is accompanied by coffee drinking, cigarette smoking and after these substances people used to drink alcohol to reduce the excitatory effect of khat and nicotine. Regular usage of all these substances could be the potential predisposing factors for mental disorder.

7. LIMITATION OF THE STUDY

Limitation of the study

- This study had some limitations; first, the study used a descriptive cross-sectional design that cannot establish trends and causality between cigarette smoking and potential risk factors.
- Second since the study is institution based study, it cannot be generalized to general population

8. CONCLUSION AND RECOMMENDATION

8.1 Conclusion

The tobacco industry is threatening our people on all aspects they package death as life, disease as health and deadly addiction as the taste of freedom and a celebration of life.

The current prevalence of cigarette smoking was high (25.6%) amongst persons with mental disorders. This cannot be ignored in the management of psychiatric disorders in psychiatric hospitals. This study identified behavioral factors such as Alcohol use, khat chewing as the most and primary determinants of cigarette smoking followed by socio demographic factors such as being single and male. The presence of these factors alone or in combination contribute for them to become cigarettes smokers among patients with mental disorders. There should be a routine screening for cigarette smoking in psychiatric patients and subsequent health education on use of Alchol and khat to reduce use of cigarette. This calls for appropriate standard of operations to be adopted as a matter of standard clinical practice and policy in psychiatric hospitals.

8.2 Recommendation

Based on the finding the following recommendations are giver for;

For policy makers

- Ministry of Health is better to work on Establishment and implementation of policies that allow to make intervention measures like screening, treatment ,tobacco smoking prevention programs and tobacco banning.

For health care providers

- Dessie Referral Hospital is better to Design educational sessions that especially focus on negative effects of smoking to patients coming for getting service.
- Providing appropriate client/family education on consequences of cigarette smoking

For future studies

- Wollo university should collaborate to do more research, including qualitative studies, is needed to better understand the determinants of smoking and explore possible interventions to facilitate and maintain smoking cessation among psychiatric patients attended in care facilities in Ethiopia.
- Studies which assess all the components of cigarette smoking should be done for comparison among different subgroups.

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ANNEX ONE: INFORMATION SHEET FOR STUDY SUBJECTS ENGLISH VERSION

CONSENT FORM

Title: Assessment of prevalence of cigarette smoking among Dessie referal hospital outpatients attending follow up services at psychiatric clinic, South wollo, Amhara regional state, Norteast Ethiopia, 2017

Principal Investigator: Habtamu Dagnaw

My name is ----------. I am a student in Addis Ababa University, College of health science, school of nursing and midwifery. I am here to do a research on use of cigarettes related with mental condition which are important for an input taking measures in tobacco cessation programs. Now I will explain about the objectives of the study so that you can have clear understanding about the study before reaching to any decision or consensus. You are requested to ask anything unclear.

1**. Purpose of the research**: the purpose of this study is to determine prevalence of cigarettes smoking and factors contributing for the use of cigarettes among psychiatric patients.

2. Procedures to be carried on: you are by chance selected to participate. Data will be collected from you by interview in order to capture important things related to the problem.

3. Expected benefits of the study: your participation in this study provides you with no direct Benefit but it will help us to identify important factors & to design important policy for the

4. Compensation: you will get no compensation benefit by participating in the study.

5. Confidentiality of your information: The information collected from this research project will be kept confidential and information about you that will be collected by this study will be stored in a file, without your name. In addition, it will not be revealed to anyone except the

Investigator and it will be kept in key and locked system, with computer pass word and at the end of the data analysis the questionnaire will be burned.

6. Termination of the study: Participation in the study is voluntary, and refusal to participate involves no penalty or loss of benefits to which you are otherwise entitled.

I would also like to inform you that this study is reviewed and approved by Department Ethical Clearance Committee and ethically cleared by Institutional Review Board (IRB), College of Medicine and Health sciences, Addis Ababa University

Tel PHONE NUMBER=0938405728

PARTICIPANT STATEMENT

I have read or have been read to the above considerations regarding my participation. I have been given a chance to ask any questions and my questions have been answered to my satisfaction. I understand that the information I give will be kept private. I understand that I may withdraw from this study at any time. My withdrawal from the study or my refusal to participate will in no way to affect me or my family's receiving medical care from any health facility. I agree to participate in this study as a volunteer.

Sign……..Date……..

Serial no……..

Witness's sign…….Date……. (Researcher/researcher assistant

Questionnaire code_____ My name is _____ I am attending my MSc. in Adult health nursing at Addis Ababa University. I brought these questions to you in order to determine the prevalence and associated factors of cigarette smoking in psychiatric patients. The purpose of the study is to determine the prevalence of cigarette smoking in psychiatric patients. Therefore, your honest and genuine participation by responding to the questions prepared is highly appreciated and helpful to attain the objective of the study. Your name will not be written on this form and no individual response will be reported to anybody. Hence, your answers are completely confidential. You do not have to answer any question that you don't want to answer and you may refuse to answer all of the questions. Please, if you cooperate by responding to the questions it means that you have your own contribution to the success of this study. Would you willing to answer? If yes,------proceed to the next page

If no-------please stop **Thank You!**

ANNEX TWO: ENGLISH VERSION SUBJECT CONSENT SHEET

The purpose of this research project has been explained to me and I understand them. I have been informed all about study and I understand them. I agree to participate as a subject in this research project. I understand that I may end my participation at any time.

Data collector name _____Date_____ Sign_____

Supervisor name_____ Date _____sign_____

ANNEX THREE: ENGLISH VERSION QUESTIONNAIRES

Part one: Socio demographic characteristics

No	Questions	Category
101	Sex of respondent	1= Male 2= Feamale
102	Age of respondent	
103	Religion	1 = Orthodox □ 2 = Islam □ 3 = Protestant □ 4 = Catholic □ 5 = Other □
104	Marital Status	1 = Single□ 3 = Divorced□ 2 = Married□ 4 = Widowed□ 5= separated
105	Ethnicity	1 = Oromo□ 4 = Gurage□ 2 = Amhara□ 5 = Other…□ 3 = Tigre□
106	Level of education	1 = Illiterate □ 2 = Read and write □ 3 = Primary □ 4 = Secondary □ 5 = College/University □ 6 = Other □
107	Occupation status	1 = Governmental employee□ 2 = Private employee □ 3 = Private business □ 4 = Non-employed □ 5 = Retired □ 6 = Other □
108	Income level	Specify_____
109	What is the patient's psychiatric diagnosis?	Specify_____

Part Two- Questions ask about your use of tobacco

No	Questions	Category
201	Have you smoked cigarettes in the past 30 days (one month)?	1= Yes 2= No If No Skip to question 301
202	If you say yes, During the past 30 days (one month), on how many days did you smoke cigarettes?	1.1 or 2 day 5. 20 to 29 days 2.3 to 5 days 6. All 30 days 3. 6 to 9 days 4. 10 to 19 days
203	During the past 30 days (one month), on the days you smoked, how many cigarettes did you usually smoke?	1. Less than 1 cigarette per day 2. 1 cigarette per day 3. 2 to 5 cigarettes per day 4. 6 to 10 cigarettes per day 5. 11 to 20 cigarettes per day 6. More than 20 cigarettes per day
204	During the past 30 days (one month) how much did you spend on cigarettes?	1.I smoke but I don't buy my cigarettes 2.Less than 10Birr 3. 11 to 20birr 4. 21 to 40birr 5. 41 to 60birr 6.61 to100birr 7. More than 100birr

Part three- Questions on Alcohol use

This section is about The Alcohol Use Disorders Identification Test (AUDIT) screening tool developed by the World Health Organization (WHO) to assess alcohol consumption, drinking behaviors, and alcohol-related problems. A score of 8 or more is considered to indicate hazardous or harmful alcohol use.

No	Questions	Category
301	How often do you have a drink containing alcohol?	(0) Never [Skip to Qs 9-10] (1) Monthly or less (2) 2 to 4 times a month (3) 2 to 3 times a week (4) 4 or more times a week
302	How many drinks containing alcohol do you have on a typical day when you are drinking?	(0)1 or 2 (1)3 or 4 (2)5 or 6 (3)7, 8, or 9 (4)10 or more
303	How often do you have six or more drinks on one occasion?	(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0
304	How often during the last year have you found that you were not able to stop drinking once you had started?	(0)Never (1)Less than monthly (2)Monthly (3)Weekly (4)Daily or almost daily

305	How often during the last year have you failed to do what was normally expected from you because of drinking?	(0)Never (1)Less than monthly (2)Monthly (3)Weekly (4)Daily or almost daily
306	How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	(0)Never (1)Less than monthly (2)Monthly (3)Weekly (4)Daily or almost daily
307.	How often during the last year have you had a feeling of guilt or remorse after drinking?	(0)Never (1)Less than monthly (2)Monthly (3)Weekly (4)Daily or almost daily
308	How often during the last year have you been unable to remember what happened the night before because you had been drinking?	(0)Never (1)Less than monthly (2)Monthly (3)Weekly (4)Daily or almost daily
309	Have you or someone else been injured as a result of your drinking?	(0)No (2)Yes, but not in the last year (4)Yes, during the last year
310	Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?	(0) No (2) Yes, but not in the last year (4) Yes, during the last year

Part three- Questions on use of other related substance

This section is about the use of other substances other than alcohol use.

401.	Have you used khat in the past 30 days?	1. Yes 2. No
402	Have you used marijuana in the past 30 days?	1. Yes 2. No
403	Have you taken hashish or shisha in the past 30 days?	1. Yes 2. No

We'd like to thank you very much for your collaboration!!!

ANNEX FOUR :AMHARIC VERSION QUESTIONNAIRES

አባሪ

የአማርኛ መረጃ መሰብሰቢያ መሳሪያ

በደሴ ሪፈራል ሆስፒታል በሚገኙ የ አእምሮ ህሙማን ሰዎች ላይ ሲጋራ አጠቃቀም እና ተያያዥ ጉዳዮችን ለማጥናት የተዘጋጀ መጠይቅ

የመጠይቅ መታወቂያ ቁጥር ..... ቀበሌ .....

ሀ. የተሳታፊዎች የጥናቱ መረጃ መግለጫ

ሰላምታ፡ እንደምን ዋልክ ወይም እንደምን አደርክ

ስሜ .....ይባላል፡፡አዲስ አበባ ዩኒቨርስቲ ህክምናና ጤና ሳይንስ ኮሌጅ የ2ኛ ድግሪ የ ነርሲንግ ተመራቂ ተማሪ የሆነዉ ሀብታሙ ዳኛዉ በሚያካሂደው ጥናት ላይ የመረጃ ሰብሳቢ ነኝ ::ሲጋራ ማጨስን አስመልክቶ እስከ 10 ደቂቃ የሚወስድ ጥያቄዎችን ልጠይቀዎ እወዳለሁ የእርሰዎ ምላሽ ሲጋራ ማጨስ ጋር ተያይዞ ያሉ ችግሮችን ለመለየት እና መፍትሄ አቅጣጫዎችን ለማስቀመጥ እንደሚያግዝ አምናለሁ፡፡ እርሰዎ የተመረጡት በሌላ ምክንያት ሳይሆን በአጋጣሚ እንደሆነ ልነግርዎት እወዳለሁ፡፡ ጥናቱን አስመልክቶ አንዳንድ ነገር ግልፅ ለማድረግ ያህል፡-

የጥናቱ ርዕስ፡- በደሴ ሪፈራል ሆስፒታል በሚገኙ የ አእምሮ ህሙማን ሰዎች ላይ ሲጋራ አጠቃቀም እና ተያያዥ ጉዳዮች የሚል ሲሆን የጥናቱ መነሻም በኢትዮጵያ ሲጋራ በአብዛሀኛው የ አእምሮ ህሙማን ሰዎች ላይ በተለምዶ ከ ድብርት ለመራቅ ይጠቅማል፤ ይሁን እንጂ ብዙ ጥናቶች ሲጋራን እንደ ልምድ መጠቀም አካላዊ ፣ አምሮአዊ እና ማህበራዊ ችግሮች እንደሚያመጣ ይጠቁማሉ ፤በዚህም የተነሳ ሲጋራን በ ሚያጨሱ ሰዎች እና ተያያዥ ጉዳዮችን ማወቅ ከ ሲጋራ ጋር ተያይዞ የሚመጡ ችግሮችን ለማስወገድ የሚጠቅሙ መፍትሄዎችን ለመቅረፅ አንደ መነሻ ሆኖ ያገለግላል የሚል ነዉ::

የጥናቱ አላማ፡- በደሴ ሪፈራል ሆስፒታል በሚገኙ የ አእምሮ ህሙማን ሰዎች ላይ ሲጋራ አጠቃቀም እና ተያያዥ ጉዳዮችን መመርመር ነዉ::

የጥናቱ ጥቅም፡- ምን እንኳን በጥናቱ ላይ የሚሳተፉ ሰዎች በቀጥታ የሚያገኙት ጥቅም ባይኖርም ከጥናቱ የሚያገኘው መረጃ በደሴ ሪፈራል ሆስፒታል በሚገኙ የ አእምሮ

ህሙማን ሰዎች ላይ ሲጋራ ማጨስ ጋር ተያይዘው የሚመጡ ችግሮችን ለመቅረፍ ከማስቻል በላይ በሀገር ደረጃ የራሱ አስተዋጽኦ እንደሚኖረዉ ይታመናል፡፡

የጥናቱ ሲጋት፡- በጥናቱ ላይ መሳተፍ ለተሳታፊዎች ምንም የሚያመጣው ችግር የሌለ እና የሚሰጡት መረጃ ሚስጥራዊነቱ የተጠበቀ ነው፡፡

የተሳታፊዎች መብት፡- በጥናቱ ላይ መሳተፍም አለመሳተፍም ሙሉ መብት ያላቸው ሲሆን ተሳታፊዎችም በማንኛውም ጊዜ እራሳቸውን ከጥናቱ ማግለል ይችላሉ፤ ከዚህም በተጨማሪ በጥናቱ ላይ ማንም አይነት ጥያቄዎች ካሏቸዉ የበለጠ እንዲብራራላቸዉ መጠየቅ ይችላሉ፡፡

የጥናቱ ሚስጥራዊነት ፡-ማንኛውም መረጃ ሚስጥራዊነቱ የተጠበቀ ሲሆን በመጠይቁ ላይ የተሳታፊዎችን ስም መግለፅም አስፈላጊ አይደለም፡፡

ለ. የስምምነት ቅጽ

ከላይ ያነበብኩልዎትን መረጃ በሚገባ ከተረዱት በጥናቱ ላይ ለመሳተፍ ፈቀደኛ ነዎት ?

1) አይደለሁም (አመሰግናለሁ) 2)አዎ (ቃለ መጠይቁ ይቀጥላል)

ጥናቱን የሚያካሂደዉ ተማሪ ፡- ሀብታሙ ዳኛዉ

ስልክ 0938405728

የተጠየቂዉ ፊርማ ..... ቀን.....

ቃለ መጠይቁ የተካሄደበት ቀን.....

የቃለ መጠይቁ ዉጤት

1) የተፈጸመ 2) መልስ ሰጭ የለም

3) መልስ ሰጭው ፍቃደኛ ያልሆነበት 4) በከፊል የተሞላ

ያረጋገጠዉ ተቆጣጣሪ ስም.....ፊርማ.....ቀን.....

ክፍል 1፡- ጠቅላላ ሁኔታ

ቁ	ጥያቄ	የኮድ ክፍፍል
101	ፆታ	1. ወንድ 2. ሴት
102	ዕድሜህ/ሽ/	_____ዓመት
103	ብሔር/ብሔረሰብህ /ሽ/	1. አማራ 4. ኦሮሞ 2. ትግሬ 5. ሌላ ይግለጹ_____. 3. አፋር
104	ሃይማኖትህ/ሽ/	1. ኦርቶዶክስ 4. ካቶሊክ 2. ሙስሊም 5. ሌላ ካለ ይግለጹ_____ 3. ፕሮቴስታንት
105	የትምህርት ደረጃ	1.ማንበብና መፃፍ የማይችል/ት/ችል 2.ማንበብና መፃፍ የሚችል/ት/ችል 3.1ኛ ደረጃ 4. 2ኛ ደረጃ 5. ዲፕሎማ 6. ድግሪ እና ከዚያ በላይ
106	የስራህ/ሽ/ ሁኔታ	1. የመንግስት ሰራተኛ 4. አርሶ አደር 2. የመንግስታዊ ያልሆነ ቅጥር 5.ተማሪ 3. የግል ስራ 6.ስራ ፈላጊ 7. ሌላ ካለ ይግለጹ_____
107	የጋብቻህ/ሽ/ ሁኔታ	1. ያገባ 3.ፈት 2. ያላገባ 4. ሌላ ካለ ይግለጹ_____
108	ወርሀዊ ገቢ	_____
109	የ አእምሮ ህመም አይነት	ጥቀስ_____

ክፍል2፡- የተሳታፊዎች የሲጋራ ማጨስ ታሪክ

201	ባለፈዉ አንድ ወር ጊዜ ውስጥ ሲጋራ አጭሰህ ታዉቃለክ/ሽ?	1.አዉቃለሁ 2.አላውቅም 47አላዉቅም ካልክ ወደ ጥያቄ ቁጥር 301 እለፍ
202	አዎ ካልክ ባለፉት ባለፈዉ አንድ ወር ጊዜ ውስጥ ለምን ያክል ጊዜ አጨስክ/ሽ?	1.1 ወይም 2 ቀን 4. 10-19 ቀን 2. 3-5 ቀን 5. 20-29 ቀን 3. 6-9 ቀን 6. 30 ቀን
203	ባለፈዉ አንድ ወር ጊዜ ውስጥ በ አጨስክበት ቀን ምን ያህል ሲጋራ አጨስክ/ሽ?	1. በ ቀን ከ 1 ሲጋራ ያነሰ 2. በ ቀን 1 ሲጋራ 3. በ ቀን ከ 2-5 ሲጋራ 4. በ ቀን ከ 6-10 ሲጋራ 5. በ ቀን ከ 11-20 ሲጋራ 6. በ ቀን ከ 20 ሲጋራ በላይ
204	ባለፈዉ አንድ ወር ጊዜ ውስጥ ለ ሲጋራ ምን ያክል ገንዘብ አወጣክ/ሽ?	1. አጨሳለሁ ነገር ግን አልገዛም? 5. ከ 41-60 ብር 2. ከ 10 ብር ያነሰ 6. ከ 61-100 ብር 3. ከ 11- 20 ብር 7. ከ 100 ብር በላይ 4. ከ 21-40 ብር

ክፍል 3 ፡-የተሳታፊዎች አልኮል አጠቃቀምን በተመለከተ

ቁ.	ጥያቄዎች	ኮድ ክፍፍል
301	ለምን ያክል ጊዜ አልኮል ነክ መጠጦችን ጠጥተሀል?	(1) አላጨቅም ወደ ጥያቄ ቁጥር 9 እለፍ (2) በ ወር 1 ወይም ያነሰ (3) በ ወር ከ 2 — 4 ጊዜ (4) በ ሳምንት ከ 2-3 ጊዜ (5) በ ሳምንት 4 እና በላይ
302	በ ጠጣክበት ጊዜ ምን ያክል መጠን ትጠጣለክ ?	(0) 1 ወይም 2 (1) 3 ወይም 4 (2) 5 ወይም 6 (3) 7፤8 ወይም 9 (4) 10 እና በላይ
303	ለምን ያክል ጊዜ 6 እና ከዚያ በላይ መጠጥ ጠጥጠክ ታጨቃለክ?	(0) አላጨቅም (1) በ ወር ባነሰ ጊዜ (2) በ ወር (3) በ ሳምንት (4) በየቀኑ ከ 201-203 ጥያቄዎች ድምር ዜሮ ከሆነ ወደ ጥያቄ ቁጥር እለፍ
304	ባለፉት 12 ወራት በምን ያክል ጊዜ ሲጋራ ማጨስን የማቆም ሙከራ አደረጉ ?	(0) አላሰታጨሰም (1) ከ ወር ባነሰ ጊዜ (2) በ ወር (3) በ ሳምንት (4) በየቀኑ
305	ባለፉት 12 ወራት ለምን ያክል ጊዜ በ አልኮል ምክንያት መስራት እያለብክ ሳትሰራ ቀረክ?	(0) አላሰታጨሰም (1) ከ ወር ባነሰ ጊዜ (2) በ ወር (3) በ ሳምንት (4) በየቀኑ
306	ባለፉት 12 ወራት ጨስጥ ለምን ያክል ጊዜ ከ ከፍተኛ መጠጥ በሁላ ጠዋት ላይ የመጀመሪያ መጠጥ አስፈልጎሀለል?	(0) አላሰታጨሰም (1) ከ ወር ባነሰ ጊዜ (2) በ ወር (3) በ ሳምንት (4) በ የቀኑ

ቁ.	ጥያቄዎች	ኮድ ክፍፍል
307	ባለፉት 12 ወራት ከ መጠጥ በ ሁላ ለምን ያክል ጊዜ የ ጥፋተኝነት ስሜት ተሰማክ?	(0) አላሰታዉሰም (1) ከ ወር ባነሰ ጊዜ (2) በ ወር (3) በ ሳምንት (4) በየቀኑ
308	ባለፉት 12 ወራት ለምን ያክል ጊዜ ከ መጠጥ በ ሁላ ስላለፈዉ ለሊት የማስታወስ ችግር ገጥሞሀል?	(0) አላሰታዉሰም (1) ከ ወር ባነሰ ጊዜ (2) በ ወር (3) በ ሳምንት (4) በየቀኑ
309	በ መጠጣትክ ምክንያት አንተ ላይ ወይም ለሌሎች ጉዳት አድረሰሀል?	(0) አላዉቅም (2) አዎ ነገር ግን ባለፈዉ አመት አይደለም (4) አዎ፣ ባለፈዉ አመት
310	ስለመጠጣትክ ጉደኛክ ዘመድ ወይም የጤና ባለሙያ ተጨንቀዉ ያዉቃሉ ወይም አስተያየት ሰተዉህ ያዉቃሉ?	(0) አላዉቅም (2) አዎ ነገር ግን ባለፈዉ አመት አይደለም (4) አዎ፣ ባለፈዉ አመት

ክፍል 4 ፡-የተሳታፊዎች የሌሎች ሱስ አምጭ መድሀኒቶች አጠቃቀምን በተመለከተ

ቁ.	ጥያቄዎች	ኮድ ክፍፍል
401	ባለፈዉ አንድ ወር ጊዜ ውስጥ ጫት ቅመክ ታዉቃለክ/ሽ?	1.አዉቃለሁ 2.አላውቅም
402	ባለፈዉ አንድ ወር ጊዜ ውስጥ ማሪዋና ተጠቅመክ ታዉቃለክ/ሽ??	1.አዉቃለሁ 2.አላውቅም
403	ባለፈዉ አንድ ወር ጊዜ ውስጥ ሀሸሸ ተጠቅመክ ታዉቃለክ/ሽ??	1.አዉቃለሁ 2.አላውቅም

አመሰግናለሁ!!!

ቃለ- መጠይቁን ጨረሻለሁ፡፡

ማንኛውም ሀሳብ ካለዎት ሊሰጡኝ ይችላሉ፡፡

ANNEX FIVE : DECLARATION

The researcher, undersigned, declare that this is my original work and has not been presented in this or any other University and all sources of materials used for this research have been fully acknowledged.

Name: Habtamu Dagnaw (BSc)

Signature: _____

Date: _____

Place: Addis Ababa University, College of Health Sciences, Department of Nursing and midwifery

A research thesis will be submitted for examination with my approval as University Examiners and Advisors:

Advisors

1. Berhanu Wordoffa (BSc, MScN)

Signature: _____

Date: _____

2. Addishiwot Fantahun(Bsc,MScN)

Signature: _____

Date: _____

Examiner

1.

Signature: _____

Date: _____

Place: Addis Ababa University, College of Health Sciences, Department of Nursing and midwifery