ADDISABABA UNIVERSITY
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PREVALENCE OF SUICIDAL IDEATION AND ATTEMPT AND ASSOCIATE FACTORS AMONG PEOPLE WITH SCHIZOPHRENIA AT AMANUEL MENTAL SPECIALIZED HOSPITAL ADDIS ABABA, ETHIOPIA.

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ACRONYMS

DSMIVTR	Diagnostic and Statistical Manual fourth edition Text Revision
AOR:	Adjusted +Odds Ratio
SPSS:	Statistical Package for Social Sciences
WHO:	World Health Organization
WMH-CIDI:	World Mental Health Composition International Diagnostic Interview

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Abstract

Background: The lifetime incidence of suicide for patients with schizophrenia is 10% to 13% compared to a general population estimate of about 1%.Suicidal ideation is an important phase in the suicidal process, preceding suicide attempts and completed suicide. Suicide and suicide attempts among individuals with schizophrenia often result in a significant psychological, social and financial burden upon individuals and families.

Objective: The objective of this study is to assess the prevalence and associated factors of suicidal ideation and attempt among people with schizophrenia in Amanuel mental specialized hospital, Addis Ababa, Ethiopia.

Method: An Institution based cross -sectional study was conducted from December 2013 to May 2014 at Amanuel Mental Specialized Hospital among people with schizophrenia. Systematic random sampling technique used to get a total of 423 samples of schizophrenic patients from outpatient department of the hospital. Thesis passed through the ethical clearance process and informed consent was obtained from study participants. Pre-tested structured questionnaire were used for interviewing the study participants. The collected data were coded, entered in to EPI-INFO software and analyzed by using SPSS version 20. The association between variables was analyzed using logistic regression analysis.

Results: The prevalence of life time suicidal ideation and attempt among people with schizophrenia was found to be 27.3% and 19.3% respectively. Multiple logistic regression model of suicidal ideation and explanatory variable revealed that being single (AOR 2.18, 95%CI: =1.72).and also for suicidal attempt who attending secondary education (AOR 4.06, 95%CI: =1.50, 10.98).similarly co-morbid depression, hopelessness, poor social support, absence .of positive symptom, and a family history of suicidal were associated with both suicidal ideation and attempt.

Conclusion and recommendation: This study reveals that a substantial number of people with schizophrenia have suicidal ideation and attempt .These problems were associated with socio-demographic and clinical factors. Therefore it is a significant public health issue that requires a great emphasis. In particular, modifiable factor such as depression and poor psycho social support should bemanage.

1. INTRODUCTION

1.1. Statement of the Problem

Suicide is a major public health problem and it is a fatal act that represents the persons wishing to die. There is a range, between thinking about suicide and acting it out. Some persons have ideas of suicide that they will never act on; some plan for days, weeks, or even years before acting; and others take their lives seemingly on impulse, without premeditation(1).

Globally, suicide represents 1.4% of the global burden of diseases, but the losses extend much further. In most European countries, the number of suicides is larger than annual traffic fatalities (2). According to data from the World Health Organization suicide represented 1.8% of the global burden of disease and it is expected to increase to 2.4% by the year 2020. Suicide is among the 10 leading causes of death for all ages in most countries and in some countries, it is among the top three causes of death for people aged 15-34 years (3). According to the nationally registered mortality data there were 5448 deaths due to suicide in South Africa between1984 – 1986 which was 1.3% of total death (4).

Suicidal ideation is an important phase in the suicidal process, preceding suicide attempts and completed suicide. Weak social ties and low support from friends or relatives have been significantly associated with suicidal ideation (5). Attempted suicide is one of the major risk factors for completed suicide, is associated with psychiatric disorders, and is also a potentially fatal event (6).

Risk situations and events that may trigger suicide attempts or suicide are poverty, unemployment, loss of loved ones, arguments, breakdown in relationships and legal or work-related problems. A family history of suicide, as well as alcohol and drug abuse, and childhood abuse, social isolation and some mental disorders including depression and schizophrenia, also play a central role in a large number of suicides. Physical illness and disabling pain can also increase suicide risks (2).

The lifetime incidence of suicide for patients with schizophrenia is 10% to 13% compared to a general population estimate of about 1%.The magnitude of increased risk for suicide among schizophrenics peaks before middle age and declines thereafter, although schizophrenic persons

tend to be at increased risk throughout the life span(7). Schizophrenia is a serious mental illness that can devastate the lives of people who suffer from it and the lives of their families. It usually strikes adolescents and young adults, disrupting their pursuit of educational and occupational goals and drastically reducing their quality of life. It occurs in all countries of the world and is among the ten leading causes of disability in those 18 to 44 years old (8).

Suicide and suicide attempts among individuals with schizophrenia often result in a significant psychological, social and financial burden upon individuals and families. For suicide attempts, there is a considerable cost to the community associated with hospital care, treatment and rehabilitation. In Australia, for example, the estimated cost associated with suicide and self-inflicted injury directly attributable to schizophrenia in 2001 was an estimated $6 million, including $4 million in hospital costs (9).

As many as half of all patients with schizophrenia experience suicidal ideation and/or make suicide attempts, compared to other patient groups, suicide attempts in schizophrenia appear to be greater violence and lethality, and more likely to be unexpected or "out of the blue." In one study of emergency room admissions, schizophrenia patients were twice as likely as other patients to use a more violent (jumping, stabbing, hanging, firearm) rather than less violent (overdose, single cuts in non-dominant arm) suicide attempt method(10).

Patients with schizophrenia in all age groups had a marked increase in mortality and suicide. Therefore specific intervention strategies for decreasing mortality and suicide should be developed for patients with schizophrenia in different age groups (11).Prevention of suicide in schizophrenia is likely to result from treatment of affective symptoms, improving adherence to treatment, and maintaining special vigilance in patients with risk factors, especially after losses (12).

There are limited data about suicide ideation and attempt in Ethiopia. Hence, the aim of this study is to assess the prevalence and associated factors of suicidal ideation and attempt among people with schizophrenia.

1.2. Literature Review

1.2.1 Prevalence of suicidal ideation and attempt among people With schizophrenia

A study was conducted inEginitionHospital, Department of Psychiatry, University of Athens the sample comprised 93 schizophrenia patients (69% men, 31% women), 20.4% reported any suicidal thought during the last 15 days; 11.8% reported frequent thoughts of being better off dead or occasional thoughts of suicide; and 6.4%reported deliberate suicide with a plan but made no attempt. Two subjects (2.2%) had attempted suicide during the last 15 days. All subjects reported both the more intense and the less intense suicidal feelings (13).

A Study in Korea done on 84 subjects with schizophrenia (comparable sex ratio and an age range of 22-55) identified 51.2% current suicidal ideation". Included 45 men (53.6%) and 39 (46.4%) women, with a mean age of37.4±7.1 (range 22-55) and a mean duration of illness of 12.9±6.1. Of the participants, forty-three (51.2%) study participants had a current suicidal ideation (14)

Study done on suicidal Ideation in patients with schizophrenia inTurkey showed that from group consisted of 120 people, 47.5% were female (n=57) and 52.5% were male (n=63). The mean age of the group was 36.7±10.5 years with a range of 18–65 years. The mean education level was 6.5±3.4 years. Of those 120 study participants, a suicide attempt history was found in 18% and31.36% of the studied group had suicidal ideation. The most commonly used method in suicide attempts was drug overdose, in 59.1%. This is followed by other ways such as jumping off a high place or jumping in front of a fast car, in 27.3%, and using sharp and perforating tools, in 13.6%. Fifty-four percent of the suicide attempters had applied for a psychiatric examination at most one month before the attempt suicide, while 77.3% of them had taken psychiatric medicine before the attempt. Of the people attempting to commit suicide, 63.6% carried out the attempt 3 years after the start of the disease (15).

A study done on suicide attempts among patients with schizophrenia in India and USA showed that about 22% of patientreported ever having attempted suicide (16).

Study examined the prevalence and correlates of current suicidal ideation and past suicide attempts among patients with schizophrenia spectrum disorders and concurrent depressive

symptoms showed that nearly half the sample (n = 132) reported having attempted suicide once or more in their lifetime(17).

The 5-year cumulative standard mortality rate among individuals with schizophrenia in Denmark increased from 5.3 (males) and 2.3 (females) in 1971-73 to 7.8 (males) and 5.2 (females)in 1980-82, an increase that in part parallels the increase in suicide rates in the general population in the same age groups in Denmark. The standard mortality rate for males in the first year following the diagnosis of schizophrenia was as high as 16.4 for men in this particular study (18).

In a cross-sectional study of co-occurring Suicidal and psychotic symptoms in inpatients at Mathari Psychiatric Hospital, Nairobi, Kenya showed that the prevalence of suicidal symptoms in patients with schizophrenia (n=234), 9.0% reported suicidal ideation, 6.0% had specific plan for death, and 5.1% had made suicide attempts(19).

A cross sectional study was conductedat Gondar, EthiopiabyMekonnen and Kebede on suicidal ideation and attempt among individuals attending an adult psychiatry out-patient clinic showed that the commonest mental illness was Major Depressive Disorder (51.3%) followed by Psychosis (38%). From a total of 474 patients ninety one (19.2 %) patients attempted suicide at least once after the onset of the current mental illness and 307(64.8%) have suicidalideation. The common method of suicidal attempt was hanging (45.1%) and 69.2% were at home (20).

1.2.2 Factors associated with suicidal ideation and attempt

Among in people with schizophrenia

A retrospective study was conducted in Barcelona, Spain that included diagnosed as schizophrenic in accordance with DSM-III-R criteria were compared with the other non-schizophrenic suicide attempters. Schizophrenic patients were significantly different in that they were younger and generally unmarried, usually used violent methods, made more attempts while in a psychiatric center, and presented a lower incidence of concurrent organic illness than the non-schizophrenics; almost all of them were chronic. A large majority (80%) showed delusional and hallucinatory symptoms at the time of the attempt. In contrast, depressive symptoms were noted in an appreciably lower percentage of subjects than that in other studies of suicidal behavior in schizophrenics (10).

A study done in Korea claimed that later age of illness onset, previous suicide attempt, family history of completed suicide, depression and substance abuse were independently related to current suicidal ideation in schizophrenic patients (14).

Study done onsuicidal Ideation in patients with schizophrenia inTurkey showed that from group consisted of 120 people. The groups having and not having suicidal ideation are compared in terms of socio-demographic and clinical features, the groups did not differ significantly in terms of gender, marital status or jobs (15).

A study done on patients with schizophrenia in India and USA revealed that the demographic variables (sex, age, education and marital status) or clinical variables (depression, hallucinations, severity of illness, longitudinal course and pattern of symptoms) was significantly correlated with suicide attempts among the Indian patients. Among the US patients, in contrast, diagnosis, depression, pattern of symptoms (positive symptoms) and education were significant predictors for suicide attempts (16).

Study examined the prevalence and correlates of current suicidal ideation and past suicide attempts among patients with schizophrenia spectrum disordersthis study showed that those who had attempted had exhibited greater depression and psychopathology. A regression analysis revealed that only past suicide attempts and hopelessness significantly accounted for the presence of current suicidal ideation. In this study Current suicidal ideation did not differ by

diagnosis, race/ethnicity, marital status, living situation, age, education, or severity of medical illness (17).

In a Study done on ninety-six patient in USA regarding suicidal ideation and suicide attempts in recent-onset schizophrenia were rated every 2 weeks for 1 year duration, the results demonstrated that: (1) the severity of suicidality changed rapidly, and suicidality did not occur in apparent episodes; (2) the probability of future significant suicidal ideation or behavior was predicted by low-level suicidal ideation, but not by anxiety or depression; and (3) subjects with low-level suicidal ideation continued to have an increased chance of significant suicidal ideation or a suicide attempt for about 3 months. These results suggested that previous findings of an association between depressed mood and subsequent suicidal behavior may be due to concurrent suicidality. While suicidality and depression often co-occur, it appears that only suicidal ideation predicts future suicidal ideation or behavior (21).

Study done on suicidal ideation in post psychotic depression claimed that active psychosis is a greater contributor than depression to suicidal ideation in patients with schizophrenia (22).

A study done in Armed Forces General hospital, in Taiwan showed that patients with suicidal behavior (suicidal ideation and attempt) generally had greater insight into illness than those who were non-suicidal. After controlling for depressive symptoms, the association of insight into schizophrenia with current suicidal ideation remained significant, whereas the association between insight and lifetime suicide attempts was no longer significant. As predicted, the regression analyses revealed that those with greater suicide risk had significantly higher levels of depressive symptoms and hopelessness and more lifetime suicide attempts. Moreover, greater insight into illness appeared to have a close, independent connection to suicidal behavior. The findings suggest that depression, hopelessness, and greater insight into illness are major risk factors for suicide in patients with schizophrenia (23).

Study on Childhood Trauma and Suicide Attempts in Schizophrenic Patients reported that, 50 chronic schizophrenic patients who had attempted suicide were compared with 50 chronic schizophrenic patients who had never attempted suicide. It was found that schizophrenics who had attempted suicide reported significantly higher scores for emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect than schizophrenics who had never

attempted suicide. Therefore, childhood trauma may be a risk factor predisposing schizophrenic patients to attempt suicide (24).

A study in Chinese rural community on demographic and clinical characteristics of individuals with schizophrenia who had attempted suicide subjects with (n=38) and those who had not made a suicide attempt (n = 472) were compared, the results indicate that attempters had a significantly younger age, higher level of education, higher rate of lifetime depressed mood and hopelessness, and a larger number of positive symptoms than patients without suicide attempts (25).

A systematic review on rates and risk factors of suicide and schizophrenia claimed that a history of suicide attempt or ideation has a strong positive correlation with completed suicide among patients with schizophrenia. Risk factors with a strong association with later suicide included being young, male, and with a high level of education. Illness-related risk factors were important predictors, with number of prior suicide attempts, depressive symptoms, active hallucinations and delusions, and the presence of insight all having a strong evidential basis. A family history of suicide, and comorbid substance misuse were also positively associated with later suicide. The only consistent protective factor for suicide was delivery of and adherence to effective treatment (26).

Study investigated on Suicide Attempts in an African Schizophrenia Population on the assessment of demographic risk factors including affected sibling pair status, subjects with schizophrenia were interviewed and then stratified into two groups: those with (n = 90) and those without (n = 364) a history of previous suicide attempts. Demographic parameters (including gender, age, and social circumstances, sib ship) were then compared across these groups. Demographic predictors of suicide included sib ship status (p = 0.038; OR = 1.7) and age of onset of illness (p = 0.008; OR = 2.5). On further analysis of suicide in siblings, only a minority of sib pairs was found to be concordant for a lifetime history of suicide attempts (3%). These findings raise the possibility that affected sib pair status may be protective in nature (27).

1.3 .Justification of the study

Suicide is a huge but largely preventable public health problem. Among psychiatric patients, patients with schizophrenia are overrepresented in suicidal ideation and attempt. Suicidal ideation is an important phase in the suicidal process, preceding suicide attempts and completed suicide. Studies reveled that schizophrenic patients were suicide attempters, compared with the non-schizophrenic.

The prevalence and risk factors for the suicidal ideation and attempts are not well known, especially in low and middle income countries including Ethiopia.

There are few community based study regarding the prevalence of suicidal ideation and attempt in Ethiopia. And also there is no published study done on the prevalence and factors associated with suicidal ideation and attempt among patient with schizophrenia in Ethiopia.

Therefore this study will be intended to fill this gap by assessing the prevalence and associated factors of suicidal ideation and attempt among people with schizophrenia at AmanuelMentalSpecializedHospital.

The findings of this study will help the institution to develop appropriate plans and intervention to reduce the problem and also can serve as base line for those who wish to conduct study on this area.

2. OBJECTIVES

2.1 General objective

- To assess the prevalence and associated factors of suicidal ideation and attempt among people with schizophrenia at Amanuel mental specialized hospital, Addis Ababa, Ethiopia.

2.2 Specific Objectives.

- To determine the prevalence of suicidal ideation and suicidal attempt among people with schizophrenia

  .
- To identify associated factors of suicidal ideation among people with schizophrenia.

- To identify associated factors of suicidal attempt among people with schizophrenia.

3. METHODS

3.1. Study design and period

An institution based Cross-sectional study was conducted from December 2013 to May 2014.

3.2. Study setting

This study was conducted at Amanuel Mental Specialized Hospital (AMSH) in Addis Ababa. It is one of the oldest hospitals established in 1930'sE.C during the Ethio-Italian war and it is the only mental Hospital in Ethiopia. In the Hospital the health service had been in 1940and delivered by low level psychiatric professionals. Starting from 1946-1970 the treatment was given by doctors came from Russia, Bulgaria, and Cuba.Expatriates upto a certain time than takeover by Ethiopians.

It is located in western part of Addis Ababa in AddisKetemaSub-city, kebele 08. The hospital is working on increasing the efficiency &effectiveness of the serves to make itself the center of mental health care excellences by giving core mental health clinical services, conducting research and trainings and other administrative services. Psychiatrist, psychiatry MSC, BSC, Psychiatry nurses, health officers, on average 29.997people with schizophrenia are seen as outpatient. each year and approximately 160 patients are admitted to the wards each month. The hospital has 300 beds that serve for all type of mental disorder patients including schizophrenia. The hospital has 13 OPDs.

3.3. Population

3.3.1. Source population

The source population was all patients who were clinically diagnosed as schizophrenia at Amanuel Mental Specialized Hospital.

3.3.2. Study population

The study population was all clinically diagnosis patient with schizophrenia who attending the outpatient department at Amanuel Mental Specialized Hospital during the study period.

3.4 .Inclusion and Exclusion criteria

3.4.1 Inclusion criteria

- Patients, who were clinically diagnosed as schizophrenia in the outpatient units of Amanuel Mental Specialized Hospital, within the age group 18 years and above, were included in the study.

3.4.2 Exclusion criteria

- Patients who were acutely disturbed.
- Patients who couldn't communicate.

3.5. Sample Size determination and Sampling techniques

3.5.1 Sample size determination

The minimum number of sample required for this study was determined by using Single population proportion formula considering the following assumptions:

$$n_i = \frac{(Z\alpha/2)^2\, p\,(1-p)}{d^2}$$

Where
n_i = minimum sample size required for the study
Z= standard normal distribution (Z=1.96) with confidence interval of 95% and α=0.05
P= the prevalence of suicidal ideation and attempt among a person with schizophrenia unknown in our country; hence, P= 50 %(0.5) was used.
d= Absolute precision or tolerable margin of error (d) =5%=0.05

$$n_i = \frac{(Z\alpha/2)^2\, p\,(1-p)}{d^2} = \frac{(1.96)^2 \times 0.5(1-0.5)}{(0.05)^2} = 384$$

Then adding 10% (384 x 0.1 = 38.4 ≈ 39) of non-respondent, the final sample size for this study was 384+39=423 patients with schizophrenia.

3.5.2 Sampling techniques

A systematic sampling technique was employed for the selection of the sampling units. The sampling fraction for this study was: 2500/423= 1/5.Hence, the sample interval was 5. Therefore;

Individuals were chosen at regular intervals (every 5th). The selected patients were directed by the facilitator to the office where the data collectors were working.

3.6 Study variables

3.6.1 Dependant variable

- ✓ Suicidal ideation
- ✓ Suicidal attempt

3.6.2 Independent variables

Socio demographic factors

- Age
- Sex
- Ethnicity
- Religion
- Marital status
- Educational status
- Employment status
- Monthly Income
- Social support

Clinical factors

- Co –morbid depressive disorder
- Co- morbid medical illnesses
- Family history of suicide attempt
- Family history of mental illness
- Hopelessness
- Drug treatment
- Positive symptoms of schizophrenia
- Negative symptoms of schizophrenia
- Episodes diagnosed for schizophrenia
- Duration of illness

Substance related factors

- Substance use

3.7 .Operational Definitions

- Suicidal ideation defined as a positive response that an individual has ever thought of killing herself/himself.
- Suicidal attempt defined as a positive response that an individual has ever tried to kill herself/himself.
- Substance use defined as use of the specified substance (tobacco, alcohol, chat, cannabis or hash) since diagnosed for schizophrenia.

3.8. Data Collection tools and procedure

A standardized structured questionnaire composed of closed-ended and open ended questions was used to collect the data. The questionnaire was adapted from World Mental Health (WMH) survey initiative version of the World Health Organization (WHO) composite International diagnostic interview (CIDI), which used to evaluate the prevalence of suicidal ideation and attempt among schizophrenic patients. The questionnaire was prepared in English and it was translated in to local language for easiness in interviewing the study participants. Then it was again translated back to English to check the consistency of meaning. Translation of questionnaire was done by the involvement of language experts.

The data were collected by trained psychiatry nurses. They were collected the data by interviewing patients and patients' informant. Also they were approached and interviewed the selected respondents after informed consent was obtained.

3.9. Data quality assurance

To ensure data quality, the data collectors and supervision were trained.The English version questionnaire translation to local language (Amharic) and back translation to English to maintain its consistence. Training was given for data collectors and supervisors. Pre-testing of questionnaire was done before the start of actual data collection. Based on the finding from the pretest, the questioner revised and adopted. Besides to these, the data collectors were supervised daily and the filled questionnaires were checked daily by the supervisors and principal investigator.

3.10. Data processing and analysis

First the filled questionnaires were checked for completeness and consistency. Then, the data were entered using EPinfo version 2002 and analyzed by SPSS version 20 software package.

Descriptive statistics were used to explain the study participant in relation to study variables. Bivariate analysis was conducted to assess the relationship between each independent variable and the outcome variable (suicidal ideation and attempt). To control for the effect of confounding factors, multivariate logistic regression was constructed.

3.11. Ethical consideration

Ethical clearance was obtained from the Institutional Review Board (IRB) of college of medicine and health sciences, and Amanuel Mental Specialized Hospital. The data collectors were clearly explained the aims of the study for study participant. The data collectors collected the Information after obtaining verbal consent from each participant. Respondents were also informed that they can refuse or discontinue participation at any time they want and they were informed that they can ask anything about the study. Information was recorded anonymously and confidentiality was assured throughout the study period.

4. RESULTS

4.1. Socio-demographic Characteristics of the Respondents

From the total of 423 people with schizophrenia targeted, All 423 respondents were enrolled and participated in the study.This yields a response rate of 100%

The mean standards age of 33.8 ±10.753SD).with a range of 18-65 years. From the respondents 138 (32.6%) were Oromo by ethnicity followed by Gurage125 (29.6%). One hundred ninety four (45.8%) respondents were Orthodox in religion followed by Muslim 147 (34.7%). Most of the respondents are single 276(65.2%) and more than 50%of the respondents had elementary and secondary education. Majority of the respondents are unemployed 169(39.9%) and with less than or equal to 569 income 295(72.0%). Two hundred sixty nine (63.5%) of the study participants were living with their family and 69(16.3%) were living with spouse. Table 1.

Table1: Distribution of schizophrenia people by their Socio-demographic characteristics, at AMSH Addis Ababa, Ethiopia, 2006 E.C.

Variables	*Frequency(n=423)*	*Percent (%)*
Age		
<25	35	8.2
25-34	145	34.2
35-44	127	30.0
>=45	113	26.7
Sex		
Male	279	65.9
Female	144	34.0
Religion		
Orthodox	194	45.8
Muslim	147	34.7
Protestant	68	16.1
Others	11	2.6
Marital Status		
Single	276	65.2
Married	84	19.8
Separated/ Divorced/Widowed	63	14.8
Ethnicity		
Amhara	114	26.9
Oromo	138	32.6
Tigre	24	5.6
Gurage	125	29.5
Others	21	4.9
Educational Status		
No formal education	79	18.6
Primary education	104	21.9
Secondary Education	147	34.7
Above secondary education	93	24.3
Employment status		
Unemployed	169	39.9
Employed	254	60.0
Monthly Income		
<=569	299	70.6
>=570	124	29.3
Current living with		
Family	269	63.5
Alone	38	8.9
Spouse	69	16.3
Children	43	10.1
Others	4	0.9
Perceived social support		
Excellent	42	9.9
Very good	72	17.0
Good	125	29.5
Fair	110	26.0
Poor	74	17.4

4.2. Description of clinical factor by respondents

As presented in table 2; among respondents majority of them recurrent episodes 183(43.2) and 140(33.0) were greater than or equal to 60 months since diagnosed. Most of the respondents have positive symptoms of schizophrenia which account 176(41.6%) have hallucination and 108(25.5%) have delusion but 173(40.8%) have no negative symptoms. About 177(41.8%) of participants had co morbid depression and 14(3.3%) was reported had physical illness. Only 42(9.9%) had family history of committing suicide and 42(9.9%) had family history of suicide attempt. Based on this study 130(30%)of respondent of were substance used after diagnosis and 172(40.6%) were ever used substance.

Table2. Frequency distribution of clinical factors among People with Schizophrenia at AMSH Addis Ababa, Ethiopia,2006 E.C.

Variables	*Frequency(n=423)*	*Percent (%)*
Episodes diagnosed for schizophrenia		
First episode	125	29.5
Second episode	115	27.1
Recurrent	183	43.2
Duration of the illness since diagnosed		
<=12 months	131	30.9
13-60 months	152	35.9
>=61 months	140	33.0
Positive Symptoms of schizophrenia for the last 1 month		
Delusion	108	25.5
Hallucination	176	41.6
Disorganized behavior/speech	50	11.8
No symptoms	173	40.8
Negative symptoms of schizophrenia for the last 1 month		
Lose of affective response	56	12.8
Blunted Affect	34	8.0
Lose of personal motivation	25	5.9
Lose of verbal expression	12	2.8
No symptoms	296	70
Co morbid Depression		
Yes	177	41.8
No	246	58.2
Physical illness		
Yes	14	3.3
No	409	96.6
Felt hopelessness over the past 12 months		
Yes	171	40.4
No	252	59.5
Drug treatment		
Yes	423	99.9
No		
Insight		
Yes	354	83.6
No	68	16.0
Family history of mental illness		
Yes	142	33.5
No	280	66.1
Family history of suicide attempt		
Yes	42	9.9
No	380	89.8
Family history of suicide		
Yes	24	5.9
No	386	94.1
Ever substance use		
Yes	172	40.6
No	251	59.3
Substance use after diagnosed		
Yes	130	30.7
No	293	69.2

4.3. Prevalence of suicidal ideation and attempt

The life time prevalence of suicidal ideation among 423 respondents was 112(26.4.) (Male) and 17.1%, females from all the respondents.8 (1.8) reported to have suicidal ideation since less than 1 month. The magnitude of suicide attempt calculated was79 (18.6%) [Male=11.50%, females =7.8] and from the respondents6 (7.6%) reported to have suicidal attempt over the past 1 months. From the study participants 91(22. %) of them had planned to commit suicide and most of the participant 59(74.7%) attempt once in their life time experience.

From the respondents who attempt suicide 43(54.4%) of them made serious attempt to kill themselves and it was only that did not succeed, 29(36%) they tried to kill themselves, but knew that the method the used was not fool-proof and hence these two assumption indicates that their attempt was actual or it was an intent to die. Whereas, the rest7 (8.9%) who answered as their attempt was a cry for help but they did not intended to die indicates that they had engaged in suicide gesture. (Table 3).

.

Table 3: Frequency distribution of life time prevalence suicide ideation and attempt ,and plan among People with Schizophrenia at AMSH Addis Ababa, Ethiopia,2006 E.C.

Variables	*Frequency(n=423)*	*Percent (%)*
Ever seriously thought about committing suicide		
Yes	112	26.4
No	311	73.5
Duration of ever seriously thought		
<=1 month	8	41.1
2-12 months	38	36.6
13-24 months	14	
>=25 Months	52	22.3
Ever made a plan for committing suicide		
Yes	91	22.2
No	319	77.8
Duration of ever made a plan for committing suicide		
<=1 months	7	7.7
2-12 months	31	34.1
13-24 months	12	13.2
>=25 Months	41	45.0
Ever attempt Suicide		
Yes	92	21.7
No	331	78.2.7
Duration of ever attempt Suicide		
<=1 months	6	43.0
2-12 months	28	32.9
13-24 months	8	10.1
>=25Months	37	24.1
Number of suicidal attempted		
Once	59	74.7
Twice	8	10.1
More than twice	12	15.2

As presented in figure 1. Most male and female respondent attempted suicide using hanging method [35.40% (28/79) and 20.20% (16/79)] respectively. Also females used poisoning method more than male respondents [12.60% (10/79)].

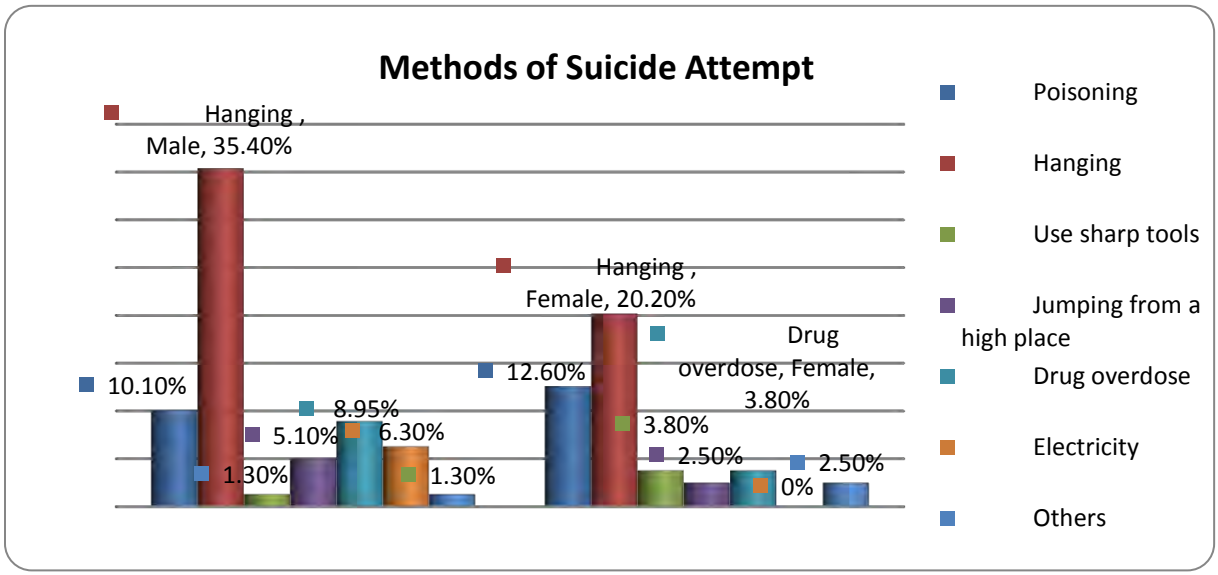

Figure 1. Percentage distribution of Methods used during suicide attempt by sex among People with Schizophrenia at AMSH Addis Ababa, Ethiopia, 2006 E.C.

As presented in figure 2 suicidal attempt mainly due to their current mental illness was reported by 43% (34/79) patients followed by family conflict 23%(18/79), 21%(17/79) were due to hopelessness

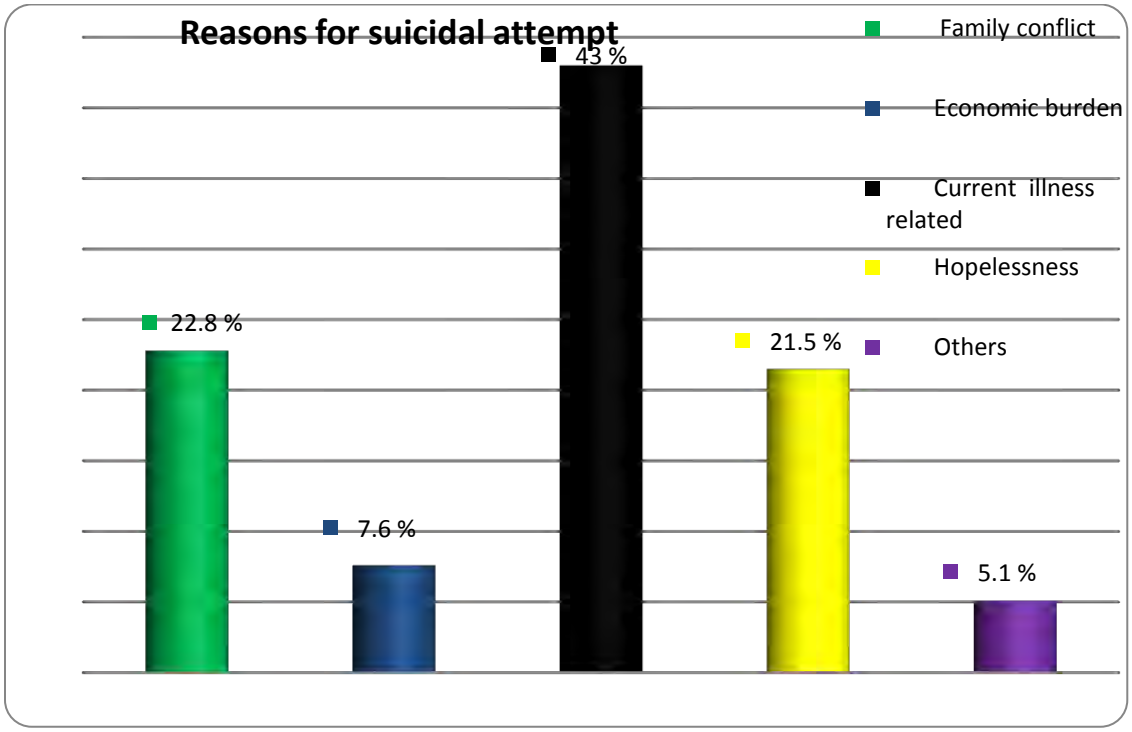

Figure 2. Percentage distribution reasons to attempt suicide among People with Schizophrenia at AMSH Addis Ababa, Ethiopia, 2006 E.C

4.4. Factors Associated with Suicidal ideation

4.4.1. Bivariate and Multivariate Analysis of suicidal ideation and Explanatory variables

To note the effect of independent variables on the dependent variable bivariate logistic regression analysis was carried out. The crude analysis was done by including socio-demographic factors, Schizophrenia related factors, Substance use. The variable group expected to be protective against suicide attempt is treated as the reference group.

On bivariate analysis marital status, educational status and perceived social support, delusion, hallucination no positive symptoms co morbid depression hopelessness, family history mental

illness, family history suicide attempt, family history suicide, chat chewing alcohol, smoking cigarettes and using hash/cannabis shows a significant association with the dependant variable. Variable P-value <0.2in to see whether there is true association or not with the dependent variable.

Multivariate analysis was employed to assess the net effect of the factor. The result of multiple logistic regression model revealed that single people with schizophrenia were two times more likely to have suicidal ideation than those marred (AOR=2.18, 95%CI: 1.01, 4.72).The clients who attend secondary education were 2.5 times more likely to have suicidal ideation than those no attended formal education (AOR=2.52, 95%CI: 1.11, 5.69).

Study participant who had poor social support were three times more likely to have suicidal ideation than those excellent social support (AOR=3.11, 95%CI (1.02, 9.42).Those respondent who report on positive symptoms were 62% less likely to have suicidal ideation than who didn't report(AOR=0.38, 95%CI: 0.21, 0.68). study participants who report co morbid depression were 2.72 times more likely to have suicidal ideation than who didn't report (AOR=). 5.41, 95%CI: 2.76, 10.60

Respondent who report hopelessness were 2.1 more likely to have suicidal ideation than who didn't report (AOR= 2.11, 95%CI: 1.45, 3.20). study participant who were the duration of duration of illness less than or equal to 12 month (AOR=3.46, 95%CI: 1.68, 7.10) and who reported the duration of illness greater than or equal to 61 month were 3.7 more likely to have suicidal ideation than those the duration of illness less than or equal to 12 month (AOR=3.70 95%CI: 1.81, 7.57). Respondent who report family history suicidal attempt were 2.3 more likely to have suicidal ideation than who didn't report (AOR=2.34, 95%CI: 1.14, 4.79). (Table 4).illness 13-60 month were 3.5 more likely to have suicidal ideation than those the

Table 4. BivariateMultivariate analysis between some of selected factors and suicidal ideation among People with Schizophrenia atAMSH Addis Ababa, Ethiopia,2006 E.C.

Variables	*Suicidal ideation*		*Adjusted OR (95% CI)*	*p-value*
	Yes Number (%)	*No Number (%)*		
Marital Status			**2.1(1.01, 4.72***	**0.006**
Single	86(33.3)	172(66.7)		
Married	12(16.0)	63(84.0)	0.72(0.26, 1.94)	
Separated/ Divorced/Widowed	14(18.2)	63(81.8)		
Educational Status				
No formal education	17(21.5)	62(78.5)	1	**0.030**
Primary education	27(29.7)	74(70.3)	1.630(0.683,3.894)	
Secondary Education	51(34.7)	96(65.3)	**2.517(1.114,5.686)***	
Higher education	17(18.3)	79(81.7)	0.977(0.379,2.516)	
Perceived social support				**0.001**
Excellent	9(21.4)	33(78.6)	1	
Very good	28(33.8)	49(66.2)	1.463(0.523,4.097)	
Good	33(18.7)	100(81.3)	0.549(0.196,1.536)	
Fair	23(20.9)	87(79.1)	0.780(0.277,2.198)	
Poor	32(52.5)	29(47.5)	**3.108(1.025,9.422)***	**0.001**
No positive symptoms				
Yes	44(19.1)	140(80.9)	**0.378(0.209,683)***	
No	81(33.3)	158(66.7)	1	
Co morbid Depression				**<0.001**
Yes	93(52.8)	83(47.2)	**2.72(1.62, 4.54)****	
No	58(23.6)	188(76.4)		
Hopelessness				**0.001**
Yes	104(46.0)	97(54.0)	**2.110(1.459,320)****	
No	47(24.o)	175(76.0)	1	
Duration of illness since diagnosed				**0.001**
<=12 months	24(18.3)	120(81.7)	1	
13-60 months	40(28.8)	99(71.2)	**3.456(1.683,7.100)****	
>=61 Months	48(34.3)	92(65.7)	**3.705(1.814,566)*****	
Family history of suicide attempt				**0.020**
Yes	28(60.9)	18(39.1)	**2.34(1.14 ,4.79)***	
No	123(32.7)	253(67.3)	1	

* P-value < 0.05, ** P-value < 0.01, **** P-value < 0.001

4.5. FACTOR ASSOCIATED WITH SUICIDAL ATTEMP

4.5.1. Bivariateand Multivariate Analysis of suicidal attempt and Explanatory variables

To note the effect of independent variable on the dependent variable (suicidal attempt), bivariate logistic regression analysis was carried out. The crude analysis was done by including socio-demographic factor and substance use .The variable group expected to be protective against suicidal attempt is treated as the reference group.

On bivariate analysis marital status, educational status and perceived social support, delusion hallucination, no positive symptoms co morbid depression, hopelessness, family history mental illness, family history suicidal attempt, family history of suicidal chat chewing, drinking alcohol, smoking cigarettes and using hash/cannabis shows a significant association with the dependent variable. Variable with p-value<0.2 in the bivariate analysis were taken to multiple logistic regression analysis to see whether there is true association or not with the dependent variable.

Multivariate analysis was employed to assess the net effect of the factor. The result of multivariate logistic regression model revealed that clients who attend secondary education were four times more likely to have suicidal attempt than those no attended formal education (AOR=4.06,95%CI: 1.50,10.98).

Study participants who had poor social support were 3.8 times more likely to have suicidal attempt thanthose that excellent social support (AOR=3.82, 95%CI: 1.06, 13.79).Those respondent whoreport no positive symptoms were 71%times less likely to have suicidal attempt than who didn't report (AOR=0.37, 95%CI: 0.209, 0.68).study participant who report to co morbid depression were 4.6 times more likely to have suicidal attempt than who didn't report(AOR=4.62, 95%CI: 2.91, 7.32).

Respondents who report hopelessness were 3.41 times more likely to have suicidal attempt.Than who didn't report (AOR= 3.41, 95% CI: 2.11, 15.5). Study participants who were the duration of illness 13-60 months were 2.5 more likely to have suicidal attempt than those the duration of

illness less than or equal to12 months (AOR= 2.55, 95% C.I: 1.17, 5.55) and who reports the duration of illness greater than or equal to 61 months were 2.4 more likely to have suicidal attempt than those the duration of illness less than or equal to 12 months (AOR= 2.48 95% C.I: 1.15,5.35).(Table 5).

Table 5. Bivariate Multivariate analysis between some of selected factors and suicidal attempt among People with Schizophrenia at AMSH Addis Ababa, Ethiopia,2006 E.C.

variable	***Yes %***	***No %***	***OR(95% CI***	***p-value***
Marital Status				
Single	*63(22.8)*	*211(76.4)*	***2.39(0.95,6.03)***	***0.006***
Married	*24(28.6)*	*59(70)*	*1*	
Separated/ Divorced/Widowed	*63(22.8)*	*211(76.4)*		
Educational Status				*0.030*
No formal education	*9(11.4)*	*70(88.5)*	*1*	
Primary education	*19(20.9)*	*64(70.3)*	*2.26 (0.79,6.47)*	
Secondary Education	*39(26.5)*	*96(65.3)*	***4.06 (1.50,10.98)*****	
Higher education	*17(18.3)*	*76(81.7)*	*1.58 (0.51,4.91)*	*0.001*
Perceived social support				
Excellent	*5(11.9)*	*37(88.1)*	*1*	
Very good	*18(24.3)*	*56(75.7)*	*2.02 (0.56,6.89)*	
Good	*23(18.7)*	*100(84.3)*	*0.94 (0.28.3.16)*	
Fair	*23(20.9)*	*95(78.1)*	*0.90 0.26,3.15)*	*0.001*
Poor	*32(52.5)*	*37(60.7)*	***3.82(1.06,13.79)***	
No positive symptoms				
Yes	*33(19.1)*	*140(80.9)*	***0.37(0.209,0.683)******	***<0.001***
No	*79(33.3)*	*158(66.7)*	*1*	
Co morbid Depression				
Yes	*73(41.5))*	*102(58.0))*	***4.625(2.918,7.323)***	***0.001***
No	*35(13.0))*	*213(86.6)*	*1*	
Hopelessness				
Yes	*80(35.4)*	*144(63.7)*	***3.415(2.114, 15.516.)***	
No	*25(12.8)*	*171(87.2)*	*1*	
Duration of illness since diagnosed				***0.001***
<=12 months	*20(35.4)*	*107(81.7)*	*1*	
13-60 months	*43(28.8)*	*112(80.5)*	***2.55(1.17,5.55)****	
>=61 Months	*32(22.9)*	*108(77.3)*	***2.48(1.15,5.35)****	
Family history of suicide attempt				***0.000***
Yes	*23(50.0)*	*22(47.9.)*	***4.664(2.447,8.889)*****	
No	*86(21.8)*	*293(77.9)*	*1*	

** P-value < 0.05, ** P-value < 0.01, *** P-value < 0.001*

5. DISCUSSION

Schizophrenic patient were exposed for suicidal ideation and attempt which are an important in the process of commuting complete suicide. Inaddition to this there are different socio-demographic, clinical factors which associate with suicidal ideation and attempt. Also affect life of individual and his/her families.

In this study the prevalence of life time and current suicidal ideation and attempt and their possible associations with different variables were assessed.The prevalence of Suicidal ideation was151(35.7%) [Male =34.4%) and female 38..2%].This finding was higher when compared to a community based studies in Addis Ababa, Ethiopia among adult population suicidal ideation was 2.7%(6).The higher magnitude of suicidal ideation in our study was most likely due to the fact that this study was conducted in a psychiatric population where high risk individuals were evaluated as compared to community based studies at Addis Ababa. Another study finding done in Gondar on suicidal ideation and attempt among individuals attending an adult psychiatry outpatient clinic 64% of respondents had suicidal ideation(20) A .The reason for this discrepancy may be due to the study participants was all patients who visits psychiatric clinic unlike this study which was only schizophrenic patients.

In a cross-sectional study of co-occurring Suicidal and psychotic symptoms in inpatients at Mathari Psychiatric Hospital, Nairobi, Kenya showed that the prevalence of suicidal ideation patients with schizophrenia reported 9.0%(19).This result is lower when compared to the result reported in this study, the possible reason might be the difference instruments used to assess suicidal ideation, different sample size used and they used inpatients unlike this study used out patients.

A study finding done on suicidal ideation in patients with schizophrenia in turkey which was 31.36% the study participant had suicidal ideation (15). This finding was closely similar with our study.

A study was conducted in Eginition Hospital, University of Athens 20.4% reported suicidal thought during the last 15 days and also the study conducted in Korea about suicidal ideation among schizophrenic patients which was reviled 51.3% of respondents had suicidal ideation (13,

14). The reason for this discrepancy may be due to the socio cultural difference among people and also it was a current suicide ideation and our study was life time prevalence and also small sample size they used.

Concerning suicidal attempt, 105(24.8%) [Males = 21.5% and females = 31, 2%] of study participants had history of suicidal attempt in their life time experience. This finding was similar with the study finding in Gondar which indicates 19.2% of the study participants had suicidal attempt (20). Another study showed that the lifetime prevalence of suicidal attempt among adults in Addis Ababa was 0.9 % and study conducted in Ethiopia (Butajira) among adults of a rural and semi-urban community showed the lifetime suicide attempt to be 3.2%(6, 21).This finding was lower when compared to our study this discrepancy may be due to there was a difference in the study population and sample size used.

On the other hand our finding was higher than the study done in Nairobi, Kenya showed that the prevalence of suicidal attempt patients with schizophrenia reported 5.1% and also our finding was slightly higher than study done in Turkish which showed 18 % of the study participants had suicidal attempt (19, 15).but it was lower than the study finding done in India among patients with schizophrenia which showed 22% ever suicidal attempt. And study conduct in Addis Ababa hospital for year duration, from 1974 to 1988 E,C. the average crude Parasuicide (attempted suicide) rate was49.80 (per 100.000) (16,29) Perhaps this discrepancy may be due to the difference instruments used to asses' suicidal attempt, different sample size used and they used hospitalized patients unlike this study used out patients.

More than seven methods were used to attempt suicide. The most commonly used method used in suicidal attempt was hanging 44 (55.6%), [35.4% and 20.2% among male and female respectively]. This was similar with the study finding conducted in Gondar on which (45.1%) of study participants were used hanging when they attempt suicide (20).Hanging was the most common method in attempting suicide and poisoning was also the second most commonly used method. Similarly studies suggested that hanging and poisoning were the most frequently reported methods of attempting suicide in other community based Ethiopian findings conducted in Butajira and Addis Ababa (21, 6) and this was consistent with our studies. But it is different

from the study finding done in Turkey which indicates drug overdose was the most commonly used method for suicidal attempt (15).

For those who attempted suicide 43% justified the underlying reason as being related to their mental illness. This was nearly similar with the study finding conducted in Gondar on which 65.1% of study participants were justified the underlying reason as being related to their mental illness (20).

Multiple logistic regression model revealed that only marital status, educational status, perceived social support, no positive symptoms, co morbid depression, hopelessness, duration of illness since diagnosis were statistically significant association with both suicidal ideation and attempt among schizophrenics patients.

In this study, the marital status was significant predictor on suicidal ideation and suicidal attempt. Those single schizophrenia patients were 3.04 times more likely to have suicidal ideation than those separated/divorced/widowed (AOR 3.04, 95% C.I=1.404-6.588). The reason for this may be those individuals with single marital status were got low social support than the counterpart. This finding is in line with the study conducted in India and USA which showed there is significant association between marital status and suicidal ideation (16).

In line with the study conducted in different regions of the world including India and USA, and Chinese indicate those schizophrenic patients at the higher level of education status were more likely to have suicidal ideation and attempt (16, 26 and 27).The clients who attend secondary education were 2.52 times more likely to have suicidal ideation than those who not attend formal education (AOR 2.52, 95% C.I=1.114-5.686).The possible reason for this may be those schizophrenic patients higher educational status may have greater insight or awareness of psychiatric condition was associated with increased risk of suicide, and this association was mediated by depression and hopelessness for the future.

Perceived social support was one of the predicting variables for suicidal ideation. Those Study participants who had poor social support were 3.11 times more likely to have suicidal ideation than those excellent social support (AOR 3.11, 95% C.I=1.025-9.422). This is in line with WHO report in 2004 and the finding on Journal of Psychosomatic Research 2010 which showed Weak

social ties and low support from friends or relatives have been significantly associated with suicidal ideation (2, 5).

In this study those respondents who report no positive symptoms were 71% times less likely to have suicidal ideation than who didn't report (AOR=0.29 0.37, 95% CI: 0.14, 0.0.57).This finding in line with other study which showed the presence of positive symptom increase the risk suicidal ideation and attempt (10, 19).

Similarly with the finding of a systematic review on rates and risk factors of suicide and schizophrenia co morbid depression was significantly associated with suicidal ideation (27). In this study those participants who report co morbid depression were 4.6 times more likely to have suicidal ideation than who didn't report (AOR 4.62, 95% CI: 2.91, 7.3).

In this study those respondents who report hopelessness were 3.4 more likely to have suicidal ideation than who didn't report (AOR= 3.41, 95% CI: 2.11, 15.5). This may be due to that individuals with felling of hopelessness were not thinking positively and not eager to use any opportunities which make them in a better position. This finding was similar with the study conducted in Taiwan and Chinese which indicate those schizophrenic patients with felling of hopelessness were more likely to have suicidal ideation (17, 24 and 26).

Study participants who were the duration of illness 13-60 months were 3.46 more likely to have suicidal ideation than those the duration of illness<=12 months (AOR 3.46, 95% C.I=1.68, 7.10) and who reports the duration of illness >=61 months were 3.71 more likely to have suicidal ideation than those the duration of illness<=12 months (AOR 3.71, 95% C.I=1.81, 7.57).

In this study family history of suicidal attempt were significantly associated with suicidal ideation and attempt among schizophrenic patients. Those respondents who report family history suicide attempt were 4.6 more likely to have suicidal ideation than who didn't report (AOR= 4.66, 95% C.I: 2.4, 8.8). The possible reason for this may be from a biological perspective, suicidality may be inherited. However, environmental and non-genetic factors such as shared exposure to family stress and common lifestyles could contribute to the suicidal behavior of both patients and their family. This is in line with WHO report, the study finding in Korea and a

systematic review on rates and risk factors of suicide and schizophrenia which indicate schizophrenic family history of suicidal were more likely to have suicidal ideation (2, 14 and 27).

6. LIMITATIONS OF THE STUDY

- Disclose It is only possible to assess stated ideation; individual is may not disclose their actual thought about suicide.

- We assessed life time prevalence rather than the point or current prevalence of suicidal ideation and attempt.

- It is only possible to assess stated ideation; individuals may not their actual thought about suicide.

7. CONCLUSION

This study reveals that a substantial number of people with schizophrenia have suicidal ideation and attempt .The rate of suicidal ideation and attempt in people with schizophrenia is found to be much higher when compared with the rate from the general population, which shows it is a significant public health issue that requires a great emphasis. Bing single, higher education, poor social support, having family history of suicidal attempt, co morbid depression, hopelessness, later duration of illness since diagnosis were positively associated, while no positive symptoms seems to be negatively associated with both suicidal ideation and attempt among schizophrenics patients.

The above clinical factors should be evaluated to predict and prevent suicidalrisk in patients with schizophrenia. In particular, modifiable factors such as depression and poorpsychosocial supportshould be managed to reduce suicidality of people with schizophrenia.

8. RECOMMENDATION

Based on the findings and the conclusions made, the following recommendations were forwarded for respective stake holders.To Amanuel mental specialized hospital

- Health care providers should screen all schizophrenic patients for suicidal ideation and attempt on a regular basis and provide necessary clinical interventions, treatment and support. Those patients found to have risk factors are in great need of help in addressing this preventable death.
- Health care providers should spent time with close relatives of patients to let them know the importance of social support.
- Prevention of suicide in schizophrenia would thus rely on identifying those individuals with the risk factors noted above, and actively treating any co morbid depressive illness and positive psychotic symptoms, as well as addressing any co-existent substance misuse.
- Clinicians should pay particular attention to feelings of demoralization when managing suicide risk in schizophrenic patients and try foster hopeful attitudes toward the future.

To Ministry of health

- Ministry of health should prepare and train health worker on screening tool for suicidal ideation and attempt for people with schizophrenia to alleviate suicidal ideation and attempt among people with schizophrenia.
- It is important raising awareness of the public about early diagnosis, treatment, predisposing and precipitating factor through educational campaigns.

To the researcher

- To sum up, since this is a preliminary study, further investigation should be continued to explain exhaustively effect of schizophrenia on suicidal ideation and attempt.

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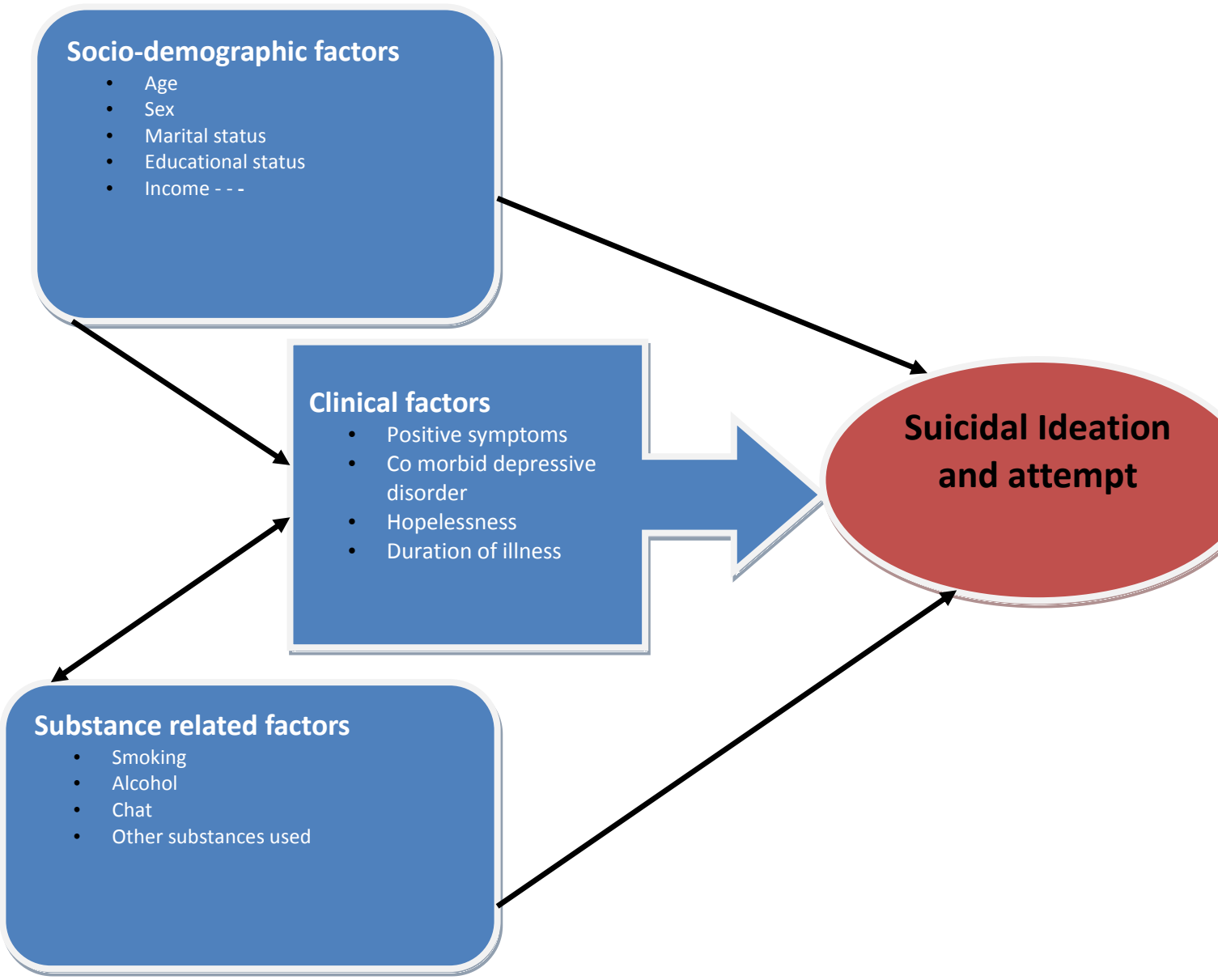
10. ANNEXES

Annex l: Conceptual frame work



ANNEX III: Consent form

Patients Information DocumentCode No: _____

Dear Participants,

My name is Jalene Aga. I am a student at Addis Ababa University of undertaking a Master's degree in emergency medicine & conducting a research project. This letter serves to ask consent from you to take part in this research. The purpose of this studies this to assess the prevalence of suicidal ideation and attempt and associated factors among people with schizophrenia at Amanuel Mental Specialized Hospital. This will be critical input for policy makers and organizations involved on care and support for schizophrenic people. Your participation in this research is voluntary. The participants are selected by chance (one person in every 5 person). The interview period will take about 20 minutes. If you decide not to participate there will be no negative consequences for you. If you do decide to participate there will be no benefits for you. Howeveryour participation on this study is very important for achievement of the study and for paving the way for the integration of mental health service in the care of schizophrenic people thereby increasing the quality of care for these people. All the responses given by you and results obtained will be kept confidential using coding system whereby no one will have access to your response. You are not expected to give your name or phone number. You have full right to refuse and withdrawal to participate in this study if you don't wish. If you are willing to participate in this study, you need to understand and sign the agreement form.

Name of investigator: Jalene Aga (BSC)

Name of advisors: Asnake Lemenh (MD, Psychiatrist)

.Lemelem Beza (BSC, MSC)

Are you voluntary to participate in the interview? Yes ☐ No ☐

Signature of participant _____ Date_____

INSTRUCTION: The questionnaire has four parts. It will take about 25 minutes to complete the interview. Please try to respond all questions. Thank you very much for your patience.

SECTION I: SOCIO DEMOGRAPHIC INFORMATION

No	Questionnaires	Alternative response	Coding
Q-101	How old are you?	Age in years----------	
Q-102	Sex	1. Male 2. female	
Q-103	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 4. catholic 5. Others----------	
Q-104	What is your marital status?	1. Single 2. Married and living together 3. Married but not living together 4. Divorced 5. Widowed	
Q-105	What is your ethnicity?	1. Amhara 2. Oromo 3. Tigre 4. Gurage 5. Others ----------	
Q106	What is the level of your education?	----------	
Q-107	What is your job?	1. Government employed 2. Merchant 3. Farmer 4. Students 5. Day laborer 6. house wife 7. Others-------	
Q-108	What is your monthly income?	_____birr	
Q-109	With whom you are living now?	1. With family 2. Alone 3. Other -------	
Q-110	How do you rate your social support?	1. Excellent 2. Very good 3. Good 4. Fair 5. Poor	

Section II. Suicidal ideation and attempt questionnaires

The following questionnaire consists of 11 items. And then pick out the one alternative choice in each group that best describes past suicidal ideation, plan, attempt including today. Be sure that you do not choose more than one statement for any item.

No	Questionnaires	Alternative response	Code
Q-201	Have you ever seriously thought about committing suicide?	1.Yes 2.No	
Q-202	If your answer is" yes" to Q-201 when?	Specify--------	
Q203	Have you ever made a plan for committing suicide?	1.yes 2.no	
Q-204	our answer is" yes" to Q-204 when?	Specify……	
Q-205	ve you ever attempt suicide?	1.yes 2.no	
Q-206	Have you ever attempt suicide?	Specify……	
Q-207	If your answers is yes to Q-205 how many times?	1. Once 2. Twice 3. More than twice	
Q-208	If your answer is yes to Q-205 what methods did you use to attempt suicide	1. Hanging 2. Poisoning 3. Use sharp tools 4. Jumping from a high place 5. Other specify--------	
Q-209	Which one of the following response most describes your suicide attempt	1.I made a serious attempt to kill myself and it was only luck that I did not succeed 2.I tried to kill myself, but knew that the method was not fool-proof	
Q-210	Can you tell the reason(S) for the attempt	1.family conflict 2.economic burden 3.Mental illness 4.Hoplessness	

		5.Commanding voice 6.Oother specify	

SECTION III: Associated factors

No	Questionnaires	Alternative response	Coding
Q-301	For how many times you diagnosed for schizophrenia?	1. First episode 2. Second episode 3. recurrent	
Q-302	For how long since you diagnosed for Schizophrenia?	In months-------	
Q-303	Have you had these symptoms in the last 1 month?	1. No Symptoms 2.Delusions 3. Hallucination 4. Disorganized behavior /speech	
Q-304	Have you had these symptoms in the last 1 month?	1. No Symptoms 2.Lose of personal motivation 3. Blunted Affect 4.Lose of personal motivation 5. Lose of verbal expression	
Q-305	Did the patient diagnosed for comorbid depression? (Fill from patient document)	1.Yes 2.No	
Q-306	Did you have known history of physical illness?	1. Yes 2. No	
Q-307	If your answer is "yes" to Q-306?	Specify----------	
Q-308	During the past 12 months, have you felt hopeless for unknown reason?	1.Yes 2.No	
Q-309	Are you on drug treatment?	1. Yes 2. No	
Q-310	If your answer is yes" to Q-309?	Specify----------	
Q-311	Do you recognize your illness as a mental disorder?	1.Yes	

		2.No	
Q-312	Do you have Family history of mental illness?	1.Yes 2.No	
Q-313	Do you have Family history of suicidal attempt?	1. Yes 2. No	
Q-314	Do you have Family history of suicidal committed?	1.Yes 2.No	

SECTION IV: SUBSTANCE USE ASSESSMENT

In the past twelve month, which of the following substances have you abuse?		Alternative response	Coding
Q-401	Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	1.Yes 2.No	
Q-402	Alcoholic's beverages (beer, wine, etc.)	1.chat 2.Alcoholicsbeverage Beer, wine, etc. 3.cigarettes/tobacco 4.hash/cannabis 5if other specify	
Q-403	If you diagnosed for schizophrenia, have you ever used substances?	1.Yes 2.No	
Q-404	If your answers is yes to Q-403,which of the following substances have you used?	1.chat 2.Alcoholicsbeverage Beer, wine, etc. 3.cigarettes/tobacco 4.hash/cannabis 5if other specify	

የታካሚውመረጃቅጽእናየተሳትፍማረጋገጫ
የታካሚውመረጃ
ውድ ተሳታፉዎች

ሰሜ ጃለኔ አጋ ይባላል፡፡ አዲስ አበባ ዩኒቨርሲቲ ተማሪነኝ፡፡ ለመመረቅ ዋናው መደረግ ያለበት ተግባር የምርመር ጥናት ማከናወን ግዴታ ነው፡:: ይህ ደብዳቤ በዚህ ምርምር ላይ ተሳታፉ እንዲሆኑ ለመጋበዝ ሲሆን የምርምሩ ዓላማ ከሰኪዞፉርንያ ህመም ጋርየሚኖሩ ሰዎች የሚገጥማቸውንተመሳሳይ ራስን ለማጥፉት የሚደረግ አሳብ እና ሙከራ ለመገምገም ነው፡፡ በሌሎች አገሮች የተደረጉ ጥናቶች እንደሚያሳዩትበሰኪዞፉርንያ ህመም አማካይነትራስን ለማጥፉት የሚደረግ አሳብ እና ሙከራ መጨመሩንእናማህበረሰቡይህንንለመቅረፍያለበትን የሳይካትሪክ እና የሳይኮልጂካል ድጋፍ እጥረት ያሳያል፡፡ የዚህ ጥናት ዓላማ በሰኪዞፉርንያ ህመም የተጠቁ ታካሚዎች በአማኑኤል ስፔሻላይዝድ የአእምሮ ሆስፒታል ከራስ ማጥፉት የሚደረግ አሳብ እና ሙከራ ጋር ያለውን ተዛማጅነት ለማጥናት ነው፡፡ ይህም ፓሊሲ ለሚያወጡ ድርጅቶች ከፍተኛ ጠቀሜታ ይኖረዋል፡፡ በዚህ ጥናት ላይ የመሳተፍውሳኔው የእርስዎ ነው፡፡ አለመሳተፍ ቢፈልጉ የሚያመጣብዎት ምንም አይነት ችግር አይኖርም፡፡ ለመሳተፍምከወሰኑምንምአይነትጥቅምአይኖርዎትምሆኖምግንበዚህ ጥናት ላይ መሳተፍዎከፍተኛጠቀሜታየሚሰጥዎ ከሰኪዞፉርንያ ህመም ጋርለሚኖሩትየሚሰጠውን እንክብካቤ እና ድጋፍ እንዲሁም የአእምሮጤናአገሌግልትበቅንጅትለመስራትየራሱንየሆነመስመርሉስለሚያልፍነው፡፡፡ ይህም ለታካሚዎችየሚሰጠውን የህክምና አገልግሎት ከፍተኛ ደረጃ ላይ እንዲደርስ ያስችላል፡፡ በጥናቱ ላይ በሚሳተፉበትወቅትበእርስዎሊይየሚደርስምንም አይነት ጉዳት የለም፡፡ በዚህ ጥናት ላይ የሚሰጡትማንኛውምአስተያየትእናመልስበኮድስርዓትበሚስጢራዊነትየሚቀመጥሲሆንለማንምሰው አይሰጥም፡፡ስምዎንምሆነስልክቁጥርዎንመስጠትአይጠበቅብዎትም፡፡ ካለ እርስዎ ፍቃድእናህጋዊመብትለሶስተኛወገንመረጃውአይተላለፍም፡፡
ለእርስዎካልመሰልዎትከዚህጥናትተሳታፈነትራስዎንየማግለል ሙለመብትአልዎት፡፡
ቃለመጠይቁ 20 ደቂቃየሚፈጅሲሆንተሳታፉዎቹየሚመረጡትበእድሌነው /ከ 5 ሰው 1/::በዚህጥናትላይለመሳተፍከፈለጉየስምምነትፉርማዎበቅፁላይመፈረምይኖርብዎታል፡፡
ከዚያምበዳታሰብሳቢዎቹምላሽዎንእንዲሰጡይጠየቃሉ፡፡

የተመራማሪውስም፡ ጃለኔ አጋስልክ፡ 0911 48 20 93
የአድቫይዘርስም 1. ዶ/ር አስናቀ ልመንህ
2. ለምለም በዛ

በቃለ መጠይቁላይለመሳተፍ ፍቃድዎነው? አዎአይደ☐ ☐

የተሳታፊ ፊርማ---------- ቀን ----------

ክፍል 1 የማህበራዊአኗኗርመረጃዎች

ተ.ቁ	መጠይቅ	ምርጫ	ኮድ
ቁ-101	እድሜዎስንትነው?	እድሜ በዓመት----------	
ቁ-102	ፆታ	1. ወንድ 2. ሴት	
ቁ-103	ሀይማኖትዎምንድንነው?	1. ኦርቶዶክስ 2. መስሊም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌልች	
ቁ-104	የጋብቻሁኔታዎ	1. ያላገባ 2. አግብቶአንድላይየሚኖር 3. ያገባሆኖምአንድላይየማይኖር 4. የፈታ 5. የሞተበት	
ቁ-105	ብሔርዎምንድንነው?	1. አማራ 2. ኦሮሞ 3. ትግሬ 4. ጉራጌ 5. ሌሎች	
ቁ-106	የትምህርትደረጃ	_____	
ቁ-107	ስራዎምንድንነው?	1. የመንግስትሰራተኛ 2. ነጋዴ 3. ግብርና 4. ተማሪ 5. የቀንሰራተኛ 6. የቤትእመቤት 7. ሌሎች	
ቁ-108	ወርሃዊገቢዎምንያህልብርነው?	_____	
ቁ-109	በአሁኑወቅትከማንጋርነውየሚኖሩት?	1. ከቤተሰብጋር 2. ብቻዬን 3. ሌሎች	
ቁ-110	የማህበራዊ ድጋፉን እንዴት ይለኩታል?	1. እጅግ በጣም ጥሩ 2. በጣም ጥሩ 3. ጥሩ 4. በቂ 5. በቂ አይደለም	

ክፍል 2.ራስን ከማጥፋት ጋር የተያያዘ ቃለ መጠይቅ

ተ.ቁ	መጠይቅ	ምርጫ	ኮድ
ቁ-201	እራስዎን ለማጥፋት ከምርዎ አስበው ያውቃሉ?	1.አዎ 2.አላውቅም	
ቁ-202	ለጥያቄ-201 መልስዎ አዎን ከሆነ መቸ?	ጊዚውን ይጥቀሱ----------	
ቁ-203	በዘህ አንድ ወር ውሰጥ እራስዎን ለማጥፋት ከምርዎ አስበው ያውቃሉ?	1.አዎ 2.አላውቅም	
ቁ-204	እራስዎን ለማጥፋት አቅደው ያውቃሉ?	1.አዎ 2.አላውቅም	
ቁ-205	ለጥያቄ-204 መልስዎ አዎን ከሆነ መቼ?	ጊዚውን ይጥቀሱ----------	
ቁ-206	እራስዎን ለማጥፋት ሙከራ አድርገው ያውቃሉ?	1.አዎ 2.አላውቅም	
ቁ-207	ለጥያቄ-206 መልስዎ አዎን ከሆነ ስንት ጊዚ?	1.አንድ ጊዚ 2.ሁለት ጊዚ 3.ከሁለት ጊዚ በላይ	
ቁ-208	በዘህ አንድ ወር ውሰጥ እራስዎን ለማጥፋት ሙከራ አድርገው ያውቃሉ?	1.አዎ 2.አላውቅም	
ቁ-209	ለጥያቄ-206 ወይም ለጥያቄ-208	1.መርዝ በመጠጣት	

	መልስዎ አዎን ከሆነ ራስዎን ለማጥፋት ሙከራ ያደረጉት በምን መንገድ ነበር?	2.በመታነቅ 3.በስለት መሳሪያ በመጠቀም 4.ከከፍታ ቦታ በመዝለል 5.ሌላ ካለ ይጥቀሱ-----	
ቁ-210	የርስዎ የራስ ማጥፋት ሙከራ ከሚከተሉት የትኛው የበለጠ ይገልፀዋል?	1.እራሴን ለማጥፋት ከልቤ ሞክሪለሁ ነገር ግን እንደ እድል ሆኖ ሊሳካልኝ አልቻለም 2.እራሴን ለማጥፋት ሙከራ አድርጌዋለው ነገር ግን ያደረኩበት መንገድ ብቁ አልነበረም 3.ሙከራዬን ያረኩት እራሴን ለመግደል ሳይሆን ሌሎች እንዲረዱኝ አትኩሮት ለመሳብ ነበር 4.ሌላ ካለ ይጥቀሱ-----	
ቁ-211	እራስዎን ለማጥፋት ሙከራ ያደረጉበት ምክንያት ሊነግሩኝ ይችላሉ?	1.የቤተሰብ ግጭት 2.ድህነት 3. የቤተሰብ በሞት መለየት 4.የገቢ ማነሰ 5.የአእምሮ ህመም 6.የአካላዊ ህመም 7. ሌላ ካለ ይጥቀሱ-----	

ክፍል 3፡ ተዛማጅየ ሆኑ መረጃዎች

ተ.ቁ	መጠይቅ	ምርጫ	ኮድ
ቁ-301	ለስንተኛግዜዎትነውበዚህየሰኪዞፋርንያህመምየታመሙት?	1.ለመጀመርያ ጊዜ 2.ለሁለተኛ ጊዜ 3.ከሁለት ጊዜ እና ከዚያ በላይ	
ቁ-302	የሰኪዞፋርንያ ህመም መሆኑን ተመርምረው ካወቁ ምን ያህል ሁኖታል?	በወራት ይግለፁ----------	
ቁ-303	ከተዘረዘሩት የህመሞ ምልክቶች በዘህ አንድ ወር ውስጥ ታይቶቦት ነበረ?	1.ምንም ምልክት አልታየብኝም 2.ትክክለኛ ያልሆነ እምነት/በሊሎች ተጽእኖ 3.ማንም ተናጋሪ በሊለበት ደምፀመሰማት/ማየት/ማሸተት 4ያልተቀናጀ ንግግር/በህሪ ማሳየት	
ቁ-304	ከተዘረዘሩት የህመሞ ምልክቶች በዘህ አንድ ወር ውስጥ ታይቶቦት ነበረ?	1.ምንም ምልክት አልታየብኝም 2.ትክክለኛ መልስ አለመሰጠት 3.ብለንትድ አፊክት 4.የግል ተነሳሽነት እጦት	

		5.በቃል በትክክል ማብራራትያለመቻል	
ቁ-305	ህመምተኛዉ ለድብርት ህመም ታክሞ ያውቃል?(ከህመምታኛዉ ካርድ ይሙሉ)	1. አዎ 2. አይደለም	
ቁ-306	የታወቀ የአካል ህመም አለብዎት ?	1. አዎ 2. አይደለም	
ቁ-307	ለጥያቁ-306 መልሶ አዎ ከሆነ	ይጥቀሱ----------	
ቁ-308	በባለፈው አሰራሁለት ወር ውስጥ ምክንያቱ ሳይታወቅ በህይወቶዎ በነገሮች ሁሉ ተሰፋ ይቆርጡ ነበር?	1. አዎ 2. አይደለም	
ቁ-309	መድሐኒት እየተጠቀሙ(እየወሰዱ) ነው?	1. አዎ 2. አይደለም	
ቁ-310	ለጥያቁ-309 መልሶ አዎ ከሆነ?	ይጥቀሱ----------	
ቁ-311	ያመመህ ህመም የአእምሮ ህመም መሆኑን ታውቃለህ?	1. አዎ 2. አይደለም	
ቁ-312	ከቤተሰብአባላትውስጥ የአእምሮ እመም ያለው አለ?	1. አዎ 2. የለም	
ቁ-313	ከቤተሰብአባላትውስጥ ራሱን ለማጥፋት የሞከረ አለ?	1. አዎ 2. የለም	
ቁ-314	ከቤተሰብአባላትውስጥ ራሱን ያጠፋ አለ?	1. አዎ 2. የለም	

ክፍል 4.የ እጽተጠቃሚነ ትሁኔታ

	በባለፈው አሰራሁለት ወራት ውስጥ ከዚህበታችከተዘረዘሩትየትኞቹንተጠቅመዋል?		
ቁ.401	በህይወት ዘመንዎ አደንዛዥ እፅ ወይም አልኮል ተጠቅመዋል?	1.አዎ 2. አልተጠቀምኩም	
ቁ.402	ለጥያቁ 401 መልስዎ አዎ ከሆነ ከሚከተሉት ውስጥ የትኛውን ተጠቅመዋል?	1/ ጫት 2/ አልኮል መጠጦች 3/ ሲጋራ(ትንባሆ) 4/ሀሺሽ 5/ ሌላ ካለ ይጥቀሱ…	
ቁ.403	የስኪዞፈርኒያ ህመም መሆኑን ተመርምረው ካወቁ በኋላ አደንዛዥ እፅ ወይም አልኮል ተጠቅመዋል?	1.አዎ 2. አልተጠቀምኩም	

ቁ.404	ለጥያቄ 403 መልሱ አዎ ከሆነ ከሚከተሉት ውስጥ የትኛውን ተጠቅመዋል?	1/ ጫት 2/ አልኮል መጠጦች 3/ ሲጋራ(ትንባሆ) 4/ሀሺሽ 5/ ሌላ ካለ ይጥቀሱ…	

Annex IV: Declaration

I, the understand, declare that this thesis is my original work in partial fulfillment ofthe of the requirement forthe use degree of Master in integrate Clinical and Community Mental Health.

Name: Jalene Aga

Signature: _____ Date_____

Place of Submission: Addis Ababa university Department of Emergence medicine

This thesis Work has been submitted for examination with my approval as University advisor

Advisors: Name signature

1. Dr, asnakelemenh (MD, Psychiatrist) _____ _____
2. Lemlem beza (BSC, MSC) _____ _____