

ANTI-SOCIAL PERSONALITY DISORDER AND ASSOCIATED FACTORS AMONG NEWLY ADMITTED PRISONERS IN BENCH MAJI ZONE CORRECTIONAL CENTER, MIZAN AMAN, ETHIOPIA, 2019

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JIMMA, ETHIOPIA

**ANTI-SOCIAL PERSONALITY DISORDER AND ASSOCIATED
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Abstract

Background: Antisocial personality disorder is an emerging health and behavioral problems worldwide. Antisocial personality disorder is linked to violence, crime, substance use, and recidivism but little is known about antisocial personality disorder among prisoners in Ethiopia.

Objective: To assess the prevalence and associated factors of antisocial personality disorder among newly admitted prisoners in Bench Maji zone correctional center, Mizan Aman, Ethiopia.

Methods and materials: An institution based cross-sectional study was conducted from April 20 to July 19, 2019 among newly admitted Bench Maji zone correction center prisoners by using face to face interview. Participants were selected using consecutive sampling technique and data was collected from 411 prisoners by using pretested, semi-structured, interviewer administered questionnaire with standardized psychopathic checklist revised for outcome variable, Moreover, a semi structured interviewer administered questionnaire was used to collect data on socio demographic, substance, environmental, criminal and clinical history. The data was entered into Epi-data 3.1 and exported to SPSS Version 21 for statistical analysis. Logistic regression model was used. P-value < 0.25 at bivariate analysis was considered as candidate for multivariable logistic regression. Then, a variable with p-value less than 0.05 at 95% CI on multivariable logistic regression was declared as independent predictor of antisocial personality disorder

Result; in this study the prevalence of antisocial personality disorder was 41.6%. Reconviction [AOR: 2, 95% CI: (1.1-3.8)], risky alcohol use [AOR: 4.6, 95% CI: (2.4-8.7)], childhood maltreatment [AOR): 6, 95% C: (2.2-17.5), poor social support [AOR: 3.5,95% CI: (1.9-6.6)], family history of imprisonment [AOR: 3, 95% CI: 1.5-6.0)] and traumatic life event [AOR: 2.3, 95% CI: (1.1-4.8)]were independently associated variables with antisocial personality disorder.

Conclusions and recommendation; antisocial personality disorder is highly prevalent among newly admitted bench maji zone correction center prisoners. Being risky alcohol user, having childhood maltreatment, reconviction, poor social support, family history of prison and having traumatic life event were independently associated with antisocial personality disorder. To solve these problems, holistic and integrated efforts including prison administration, Mizan Tepi University, family members and the surrounding community are needed to be involved.

Keywords: Antisocial personality disorder, prisoners, crime, alcohol use, Ethiopia.

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Abbreviations/Acronyms

AOR	Adjusted odds ratio
ASPD	Antisocial Personality Disorder
CBT	Cognitive Behavioral Therapy
DSM 5	Diagnostic and Statistical Manual of Mental Disorder 5 th edition
JUMC	Jimma University Medical Center
JU	Jimma University
IPDE-SQ	The International Personality Disorder Examination-Screening Questionnaire
PCL-R	Psychopathic Checklist Revised
SIPD –IVS	Structural Interview for Personality Disorder
SPSS	Statistical Package for Social Science
UK	United Kingdom
USA	United States of America

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Personality refers to all of the characteristics that adapt in a unique ways to ever changing internal and external environment (1). Personality disorder is one of the mental disorder which can be defined as an enduring pattern of behavior and inner experiences that deviates significantly from the individual's cultural standards, it is common and it takes decades to be expressed , it presents 10 to 20 % in the general population (2). It is related with ways of rationalizing and sensing about oneself and others that considerably and adversely affect how an individual works in many features of life (3).

Antisocial personality disorder is an inability to conform to social norms that ordinarily govern many aspects of person's adolescent and adult behavior. Those with this disorder don't tell truth and cannot be trusted to carry out any task or adhere to any conventional standard of morality(1) .

Antisocial Personality disorder is caused by a combination and interaction of genetic and environmental influences. It is the intrinsic temperamental inclinations as determined by their genetically influenced physiology and environmental factors. From such environmental factors, like social and traditional experiences of a person in juvenile and adolescence surrounding their family dynamics, peer influences, and social values. People with ASPD have decreased activity in pre frontal cortex and have difficulty in, behavior control, planning ahead; determining consequence of their action and differentiating between wright and wrong. People with an antisocial or substance using parents are reflected to be at higher possibility. Fire-set and brutality to animals during juvenile are as well linked to the development of antisocial personality (4).

Antisocial personality disorder (ASPD), especially psychopathy as its extreme form, has provoked fear and excitement over thousands of years. Ruthless violence involved in the disorder has inspired scientists; too. The importance of personality disorders for violent and criminal behavior is illustrated by their high prevalence in prison populations. Especially antisocial personality disorder and antisocial personality traits are linked to violence and crime (5).

1.2 Statement of the problem

More than 200 million people worldwide have antisocial personality disorder and it is more common in prison population, poor urban areas, and people with alcohol use disorder. About three in four prisoners worldwide suffer from antisocial personality disorder. Estimated 750,000 prisoners in Africa have ASPD (6). More than 70% of men with alcohol use disorder have antisocial personality disorder (1). Prisoners are more than ten times more likely to exhibit antisocial personality disorders than the general population (7).

Most of the researches done on antisocial personality disorder were on developed countries. In review of 62 surveys conducted in 12 developed countries reported that 47% of men and 21% of women prisoners had antisocial personality disorder (8). A meta-analysis study from Canada revealed that the prevalence of ASPD was 50% in male offenders (9). Studies reported different levels of ASPD among African detainees. 46.1%, among south African prisoners (10). 47% among male and 21% among female Nigerian prisoners (11).

ASPD is a common condition with major public health implications. Treatment for those affected by violence costs an estimated 6% of the health budget in the U.K, primarily due its association with drug abuse, suicide, violent crime, unemployment, homelessness, and family violence. Consequently, it has a great economic cost(12).

People with ASPD die younger than the general population, and the causes of death are more violent than the general population. The mortality among ASPD was about five fold when compared with general population (18).

ASPD is associated with co-occurring mental health disorders and medical co-morbidity, like (psychosis, major depressive disorder, bipolar disorder, anxiety disorders, substance use disorders, and sexual disorders). People with ASPD are at risk for traumatic injuries, accidents, homicide, suicide attempts, hepatitis C infections, and the human immune deficiency virus. As a result, Rates of natural and unnatural death are excessive in those with ASPD(15).

people with ASPD were charged with violent crimes such as murder, assault, armed robbery and kidnapping, non-violent crimes like fraud, theft, and housebreaking, sex crimes e.g. rape and indecent assault and drug related offense e.g. possession of or dealing in illegal substances as a result they repeatedly imprisoned, Among peoples with ASPD there is 21.7 % of recidivism rate (10). They frequently perform acts that are grounds for arrest (3). About 4 in 10 prisoners with ASPD are unemployed and 3 in 10 are recidivist. This makes them nonproductive due to spending of their time in prison (16).

There are a number of contributing factors which could be identified to assist explain the high number of people with ASPD in the prison center. These factors could include no exclusion of mentally ill people, an increase in the use of drugs and alcohol by people with mental illnesses and the limited capacity or none functionality of community-based mental health services to address the needs of mentally ill offenders (17).

Majority of the population in the prison were found in the productive age category that will be returned to their community after they complete the time at jail. However, the emphasis given to mental health was very low across the world in general and for prisoners in particular. This is even more in our country with limited resource and still there is no accurate magnitude and factors associated with ASPD among prisoners who were incarcerated in Ethiopia, particularly in southern nation nationalities Regional state in bench Maji zone. Even though health care facility for mental disorder was planned in our country, interventions against the problem were very inadequate, which might be due to few evidence about the problem. Thus, establishing the prevalence and associated factors of ASPD, is of great importance (18). Therefore, assessing the prevalence and associated factors of antisocial personality disorder among prisoners will help for future interventions.

1.3. Significance of the study

Early identification, treatment, and prevention of ASPD are important public mental health initiatives that could reduce recidivism, risk substance use, premature mortality, crime and excess costs for treatment among this vulnerable population. Even though the problem is huge; there is limited information about ASPD and associated factors in our country. Therefore, this study determined the prevalence of ASPD and associated factors among newly admitted prisoners of Bench Maji zone correction center prisoners. Having knowledge on ASPD and its associated factors among newly admitted prisoners will help for prevention, planning of treatment, intervention, and to decrease crime and recidivism. As well as this study will be used as base line data for policy makers, health planners and managers to improve the service as well as other researchers to study in this area.

CHAPTER TWO: LITERATURE REVIEW

2.1 Overview

Antisocial personality disorder has an association with multiple problems, such as substance abuse, gender, crime, family violence, early unnatural death, unemployment, homelessness, deliberate self-harm, and social and environmental related problems (20).

2.2 Magnitude of antisocial personality disorder

Across-sectional study conducted among 120 Korean adolescents on probation by using The Mini-International Neuropsychiatric Interview, Almost half of the juvenile offenders had psychiatric disorders and antisocial personality disorder (11.67%) (21). A research from Germany conducted only on female inmates with 60 participants by using PCL-R and with the cut point score of 25 shows the prevalence rate of psychopathy was 17%, (22).

Another cross-sectional study done in Iowa correction center in USA on 320 newly admitted prisoners by using The Mini International Neuropsychiatric Interview (MINI) revealed that the prevalence of ASPD was (35.3%) and ASPD was associated with recidivism, alcohol use disorder, and chronic mental illness (23).

Another cross-sectional study done by using The Mini International Neuropsychiatric Interview (MINI) from France inmates Overall 647 men and 60 women were included shows that 31.4% of repeat incarcerations were attributable to antisocial personality disorder, 28.3%. suicide, post-traumatic stress disorder and psychosis are independently associated with violent offence (24).

Another cross sectional study conducted in UK on pre-sentence prison population by using The International Personality Disorder Examination–Screening Questionnaire (IPDE-SQ) self-administered questionnaire (ICD-10 version) was completed by 283 prisoners the prevalence of ASPD was 25.8%,((25).The study done in 25 Spanish prisons (on 255 participants) by using The Personality Diagnostic Questionnaire-4, PD prevalence was 70.5%, with antisocial PD being the most prevalent. In terms of PD clusters, the most prevalent was cluster-B (55.4%) (26).

In a systematic review of 62 surveys conducted in 12 developed countries reported that,62% of men and 42% of women prisoners had personality disorder, 47% of men and 21% of women prisoners had antisocial personality disorder(8).

A cross sectional study conducted in Italy on 15,751 participants from 57 detention facilities in six Italian regions shows mental disorders are highly prevalent among prisoners (41.3%55.4), among which antisocial personality disorder was the first with the prevalence of 20%, (27).

A survey study on a sample of 496 sample in England and Wales using the schedules for clinical interview in neuropsychiatry, psychopathy checklist-revised and structured clinical interview for diagnostic statistical manual of mental disorder, fourth edition axis 2 personality disorders. Among 496, 222 (44.9%) diagnosed with ASPD out of them only 67 (31%) diagnosed with psychopathy score 25 and above of the psychopathy checklist-revised, (28) .

A cross sectional study done in UK in Australia by using the Diagnostic Interview Schedule from a random sample of 495 sentenced inmates completed an interview shows that 56% of them were with ASPD(29). Other cross- sectional study done in UK by using PCL-R among 53 prisoners, indicated that the prevalence of ASPD was 62 % (30) .An institutional based cross sectional descriptive study among prisoner in Egypt by using Arabic version of the Structured Clinical Interview for the DSM-IV Axis I and Axis II disorders in randomly selected sample of 1350 from 16 different prisons, prevalence of personality disorder was 13.6% among them ASPD was the most common (31).

A cross sectional research done in south Africa on 193 sample of prisoners by using mini neuro-psychiatric interview tool the prevalence of ASPD was 46.1% , (10). A pee-test, post-test control group experimental design study done in Nigeria on 300 participants by using Antisocial personality Disorder self-test, the prevalence of ASPD was 47 % in male and 21% in females prisoners .There was significant main effect of treatment on antisocial personality disorder of the prison inmates (11).

2.3 Determinants of anti-social personality disorders among prisoners

2.3.1 Socio demographic factors

An epidemiological catchment area study done in USA shows those socio demographic factors like being male, younger age and poorly educated have higher prevalence rate of ASPD. Being male have a prevalence of as high as 6-8 times more ASPD than female, and being young age (25-44) for both sex has high prevalence of ASPD than the older age individuals. The odds of ASPD was high for those who leaves school at the age of 11 ,it was 5 times higher than from

those who remain at school, (32). The global meta-analysis study done on different world countries in 2015 showed that low socio economic status is highly associated with antisocial personality disorder (33).

Cross sectional study from Zambia with a sample size of 206 inmates by using self-reported questionnaire (SRQ-20) 63.1% had current mental disorder including personality disorders. Among the factors marital status was significantly associated with mental illness. Married participants were 40% less likely to have mental illness compared with participants who were separated or divorced (34).

A literature review from Australia reveals that in community sample there is a real difference between male and female sex by using various assessment instruments and diagnostic manuals, Crime rates are low in women compared to men. The two disorders most commonly associated with offending behavior, antisocial personality disorder (ASPD) and psychopathy, are also less prevalent in female samples. The difference in prevalence between male and female is reported that 27.2% were males and 7.5% were females. Two to five-fold rates of ASPD is found in men but the difference becomes less in prison sample (35).

DSM 5 indicated that ASPD is more frequently diagnosed in males than females, people with alcohol use disorder , in prison setting, people affected by poverty, migration and poor urban areas (3). A study from Atlanta in USA shows relatively little is known about psychopathy and ASPD in females and there is a difference in the prevalence of ASPD in male and female inmates. The research was done using PCL-R with a cut -off score of 29 and 15% of women and 30% of male inmates were psychopathic (37).

2.3.2 Substance related factors; the cross-sectional study done in university of South Dakota United States 624 undergraduate college students, ASPD is significantly associated with alcohol consumption (38). Another study from University of Otago, Wellington, New Zealand shows that People with antisocial Personality disorder had the highest lifetime alcohol use disorder prevalence, 76.7%, followed by those with borderline Personality disorder ,52.2%, while those with other forms of Personality disorder, or undifferentiated Personality disorder , had a prevalence of 38.9%. The majority of people With Personality disorder experience an alcohol use disorder at some time in the life course (39).

Another study from the US indicates that most people from the community sample with ASPD are chronic cigarette smokers, alcohol and marijuana users (40). The study conducted in Egypt among prisoners mentioned that the prevalence of ASPD in Substance users was three times higher than non-users and the prevalence of ASPD is two times more common in those who have repeated admission to prison (41). Another study done on Finland on 1004 prisoners by using cohort study design showed that family history of antisocial (violence) was strongly associated with antisocial personality disorder(42).

Across-sectional study conducted among 120 Korean adolescents on probation by using The Mini-International Neuropsychiatric Interview shows that Alcohol use disorder was significantly associated with repeated offenses(21). A cross sectional research done in south Africa on 193 sample of prisoners by using mini neuro- psychiatric interview tool the prevalence of ASPD was 46.1% and the commonest disorder being substance and alcohol use disorder (10).

2.3.3 Clinical factors

Having other psychiatric disorder has 2.5 times increasing the prevalence of ASPD among prisoners than those without mental disorders, (33). The prevalence of Personality disorders in Spanish prisoners who initiate chronic hepatitis c and HIV treatment is very high (26) .

A study done in UK in Australia from a random sample of 495 prisoners,56% of them were with ASPD, and Two-thirds of the prisoners with ASPD presented a lifetime anxiety disorder (29). Other cross sectional study done in UK indicated that Patients with antisocial/borderline comorbidity took significantly less time to re-offend compared with those without such comorbidity (30). People with an antisocial or alcoholic parent are considered to be at higher risk for development of ASPD (4).

Another study done on 320 offenders of USA by using mini international neuropsychiatric interview (MINI) shows that the prevalence of ASPD was 35.3 and they had higher suicide risk, impaired quality of life, high recidivism, high rate of depression , anxiety disorder, psychosis, conduct disorder, borderline personality disorder, attention deficit hyperactive disorder,

substance use disorder, high rate of punishment for misconduct in prison, prior mental health treatment and worse mental health functioning (23).

2.3.4 Environmental factors

The study done on the university of south Florida among 223 prisoners shows that childhood physical abuse, sexual abuse and childhood neglect is associated with antisocial personality disorder (43). Another study done on south Carolina among 1381 individuals by using logistic regression model revealed that childhood maltreatment was significantly associated with antisocial personality disorder(44).

Another study done on Taiwan among 2491 adults revealed that sleep problems, lack of social support and family conflict is significantly and positively associated with ASPD (45). A cohort study done on 1037 participant in the new Zealand by using regression analysis indicates that childhood and adolescent excessive television viewing is more significantly associated with early adulthood antisocial personality disorder (46). The study done on new york among 1271 participants by using longitudinal probability sampling showed that childhood stressful life events ,coercive parental discipline ,exposure to violence, physical trauma, physical and sexual abuse are strongly correlated with antisocial personality disorder (47).

2.4: Conceptual frame work

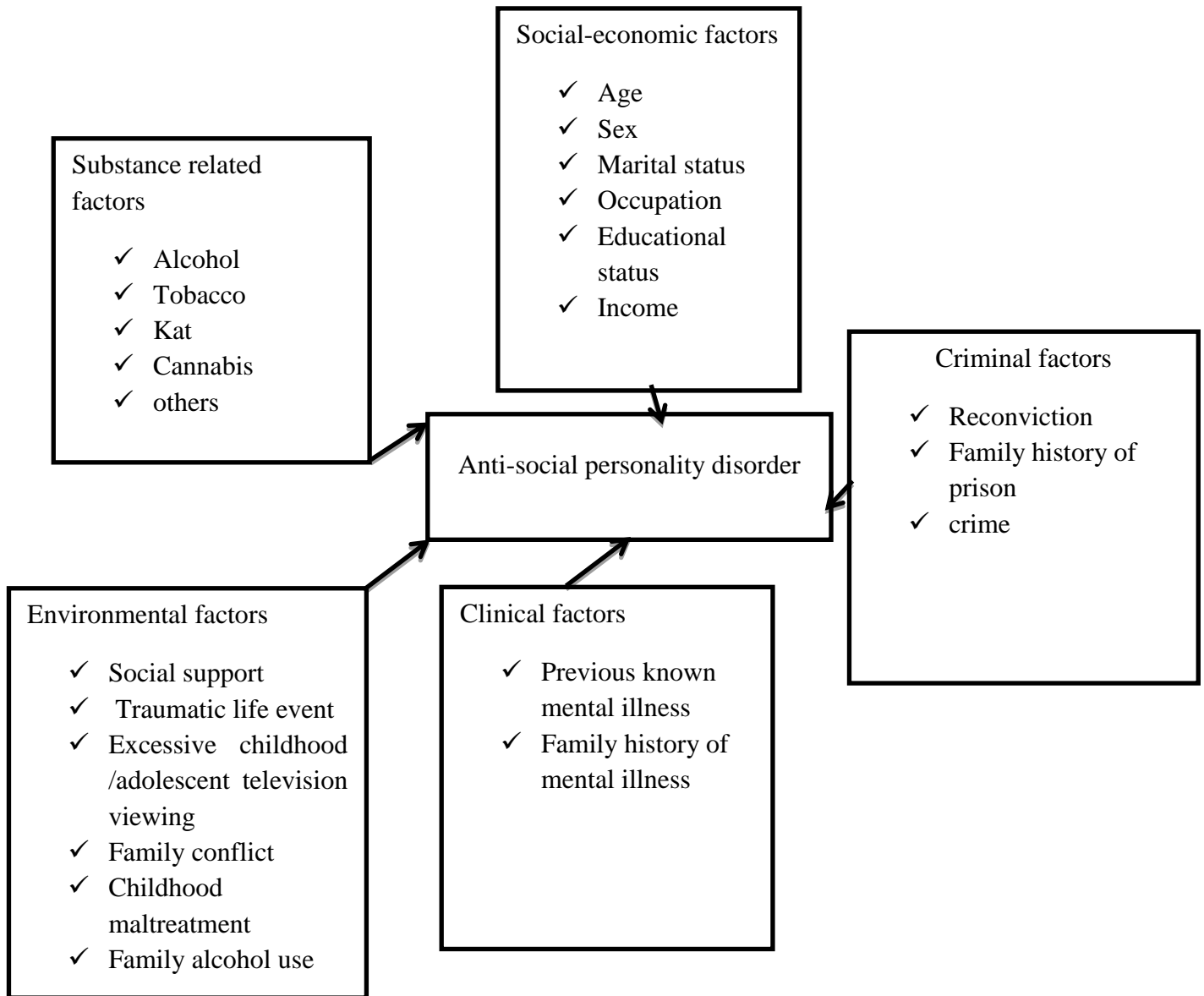


Figure 1: Conceptual frame work developed after reviewing from different literatures for ASPD and associated factors.

CHAPTER THREE: OBJECTIVES

3.1 General objective

To assess the prevalence and associated factors of antisocial personality disorder among newly admitted prisoners in Bench Maji zone correctional center, Mizan Aman, Ethiopia, 2019.

3.2 Specific objectives

To determine the prevalence of antisocial personality disorder among newly admitted prisoners in Bench Maji zone correctional center, Mizan Aman, Ethiopia, 2019

To identify factors associated with antisocial personality disorder among newly admitted prisoners in Bench Maji zone correctional center, Mizan Aman, Ethiopia, 2019

CHAPTER FOUR: METHOD AND MATERIALS

4.1. Study Area and period

The study was conducted in Bench Maji Zone correctional center from April, 20 to July, 19, 2019. Bench Maji Zone is located in Southern Nation Nationality peoples Regional State , which is 565km far from the capital city of Ethiopia; Addis Ababa. It has population of 781,006 according to 2009 census. The correctional center was established in 1973 .It gives service for Bench Maji zone and its surrounding Woreda. The correctional center had 2025 sentenced prisoners at the time of study. It has one clinic serving for prisoners.

4.2. Study design

Institution based cross sectional study design was conducted.

4.3. Population

4.3.1. Source Population

All newly admitted prisoners at bench Maji zone correctional center and in similar areas in Ethiopia.

4.3.2. Study Population

All newly admitted prisoners, who fulfill the eligibility criteria at the time of data collection period.

4.4. Eligibility criteria

4.4.1. Inclusion Criteria

- All newly admitted prisoners arrived at data collection period were included in the study.

4.4.2. Exclusion Criteria

- Having hearing and communication impairment
- Those who are acutely sick
- Ages less than 18 year were excluded.

4.5. Sample size determination and sampling technique

4.5.1. Sample size determination

The sample size (n) was calculated by using the single population proportion formula, $n = ((Z_{\alpha/2})^2 \times p(1-p))/d^2$, assuming a prevalence (p) =50%, because I could not find similar study done in our country or near to our country. A 95% confidence interval (CI) of 1.96 ($Z_{\alpha/2} = 1.96$), (d=0.05), and a non-response rate of 10%.

$$n = \frac{(\frac{z\alpha}{2})^2 p(1-p)}{d^2}$$

Where n=sample size

- z =confidence interval
- d=margin of error
- P = estimated proportion is assumed as 50 % (0.5)
- Then, $n = (1.96)^2 \times (0.5(1-0.5))/0.05^2 = 384$
- After considering 10% non-response rate, the final sample size was **422**.

4.5.2. Sampling technique

Consecutive sampling technique was used.

4.6. Variables

4.6.1. Dependent variables

Antisocial personality disorder

4.6.2. Independent variables

Socio demographic-economic factors

- Age
- Sex
- Marital status
- Occupation
- Income
- Educational status

Substance related factors

- Alcohol use
- Khat use
- Cigarette use
- Cannabis use
- others

Environmental related factors

- Social support
- Childhood maltreatment
- traumatic life event
- Excessive childhood /adolescent television viewing
- Family conflict

Clinical related factors

- Family history of mental illness
- Previous Known mental illness
- Family history of alcohol

Crime related factors

- Prior convictions
- Crime
- Family history of prison

4.7. Operational definition

Anti-social personality disorder, those who score 25 and above in PCL-R symptom rating scale found to be having antisocial personality disorder and below 25 are not considered having ASPD (48).

Newly admitted prisoner: The prisoner who was admitted to the correction center in the past 48 hours

Oslo -3 social support scale ;according to Oslo-3 social support scale it is classified in to three categories (49).

- Poor support 3-8

- Moderate support 9-11
- Strong support 12-14

Substance: alcohol, tobacco, and khat

Ever use of substance; using at least one of any specific substance for non-medical purpose at least once in life time (50).

Current use of substance: using any specific substance for non-medical purpose at least once in the recent three months (50) .

High risk use of alcohol: assist score of >26 (50) .

Moderate risk use of alcohol: assist score of 11-26 (50) .

Low risk use of alcohol: assist score of 0-10 (50) .

High risk use of tobacco, khat: assist score of >26 (50)

Moderate risk use of tobacco, khat : assist score of 4-26 (50)

Low risk use of tobacco, khat: assist score of 0-4 (50)

Past history of mental illness: previously diagnosed mental illness and whether treated in the past or currently on treatment.

Family history of mental illness; previously and currently diagnosed mental illness in nuclear parents.

Family history of alcohol use; a prisoner lived with alcohol using father and mother.

Multiple childhood maltreatment : if at least three childhood adverse effect recorded from childhood adverse effect screening tool (51).

Multiple traumatic life event : if at least two traumatic life event happened from the traumatic life event check list (52).

Reconviction: having one or more prior history of prison in their life time.

Family history of prison: prior and current prison history of nuclear parents.

Excessive childhood television viewing: watching television for more than 3 hours per a day.

4.8. Data collection instruments and Data Collection Procedure

Data was collected using pre tested semi structured questioner, which has five parts. Socio demographic -economic information, environmental factors, clinical factors, substance related factors, criminal factors and PCL-R semi structured questioner. Questioner for ASPD Hare's PCL-R was used to assess for the presence of ASPD, which has two factor designs. Factor one reflects affective symptoms and factor two related to social deviant behavior which matches

closely with DSM-4 criteria for antisocial personality disorder. It is a gold standard tool used throughout the world and scored based on interview, file review and collateral information. The PCL-R consists of a 20 item symptom rating scale. Each item in PCL-R is scored on three points (0, 1, 2) according to specific criteria, 0 is assigned if the item does not apply, 1 if it applies somewhat, 2 if it fully applies, with a total score of 40 and those who score 40 were full blown psychopath, 30 score or more were psychopathic, those who score 0 being no psychopath, those who score 20-25 were considered antisocial personality disorder (53). The reliability of item and inter-rater reliability are $\alpha=.87$ and $.91$ respectively (48). The Cronbach's alpha in this study was 0.92.

The questionnaire was used to assess' explanatory variables for ASPD. Socio-economic factors (sex,age,maritalstatus,occupation,ethnicity,religion,personalincome,and,educationalstatus),environmental factors (social support, childhood maltreatment, traumatic life event, excessive childhood or adolescent television viewing, and family conflict).clinical factors (history of known mental illness, family history of mental illness, family history of alcohol use).criminal factors (reconviction, family history of prison,). These variables were used because studies found that they were relevant for ASPD.

Social support was assessed by using oslo-3 social support scale (49) , substance use by WHO ASSIST screening tool(50) . Life event check list was used for traumatic life event (52). And adverse life experience tool questionnaire was used for childhood-maltreatment(51).

Data was collected by trained data collectors by using Amharic version. It was collected using face to face interview by structured questionnaire. The English version questionnaire was translated to Amharic version, and then it was translated back to English by independent language expert person to check for consistency. Data collectors and supervisor was psychiatric nurses who work in Mizan Tepi University teaching hospital. There were 3 data collectors, a supervisor and the overall activities were supervised by principal investigator. A supervisor was checking the completeness of the collected data daily.

4.9. Data Analysis

The entire Questionnaire was checked for completeness by manually. The data was cleaned, coded and entered in the computer using Epi-Data version 3.1, then it was exported to SPSS 21

version statistical software for analysis. Descriptive statistics, characteristics of respondents was analyzed by descriptive statistics using table, chart and frequency.

Bi-variate and multivariate logistic regressions were used to identify the independent factors for ASPD and crude and adjusted Odds ratio was computed for each variable to determine the strength of association. A bivariate analysis was performed to assess the association of each independent factor with ASPD. Then; a candidate variable with p-value less than 0.25 on bivariate analysis was entered into multivariate logistic regression to control the con-founder after checking the multicollinerity. The assumption fitness was tested by Hosmer Lemeshow goodness fit test. Independent factors associated with antisocial personality disorder were declared at P-value < 0.05 cut of point and strength of the association was assessed using AORs with their corresponding CIs at 95%. Then, a variable with p-value less than 0.05 on multivariable logistic regression was considered as statistically significant.

4.10. Data management and Quality control.

Pretest was conducted on 5% of the sample size one week prior to the actual data collection on kefa zone prison, which is located 112km away from Mizan Aman town before the main study to identify potential problems in data collection tools . Correction of the questionnaire was done according to pretest result. Training was given for data collectors and supervisors by the principal investigator on the methods of data collection and ethical issues for two days.

4.11. Ethical consideration

Ethical clearance was obtained from the Institutional Review Board (IRB) of Jimma University, institute of health. Permission letter was also obtained from prison administration, after the objectives of the study was explained. Written consent was sought from selected Participant to confirm willingness to participate in the study. Privacy and confidentiality was ensured throughout the process of the study.

4.12. Dissemination plan

The final report of the study will be submitted to Jimma university institute of health and department of psychiatry. The finding of this study will be disseminated to bench Maji zone correctional center. The finding will be disseminated to bench Maji zone health bureau for future

planning. The findings will be presented in health professional organizations, meetings, professional conferences and training and at last attempt for publication will be done in national or international peer reviewed journal.

CHAPTER FIVE: RESULT

5.1. Socio-demographic and economic characteristics

A total of 411 prisoners were participated in this study with the response rate of 97.4%. The mean age of the participant's age in year was 29.24 ± 8.33 SD and more than half 249(60.4%) of the participants were in the age groups 25 to 44 year. Regarding to the sex of the respondents almost all 404(98.3%) were males and nearly two third 268(65.2%) of the participants were protestant in religion. Concerning to ethnicity half of 208(50.6%) was Bench followed by shako 63(15.3%).

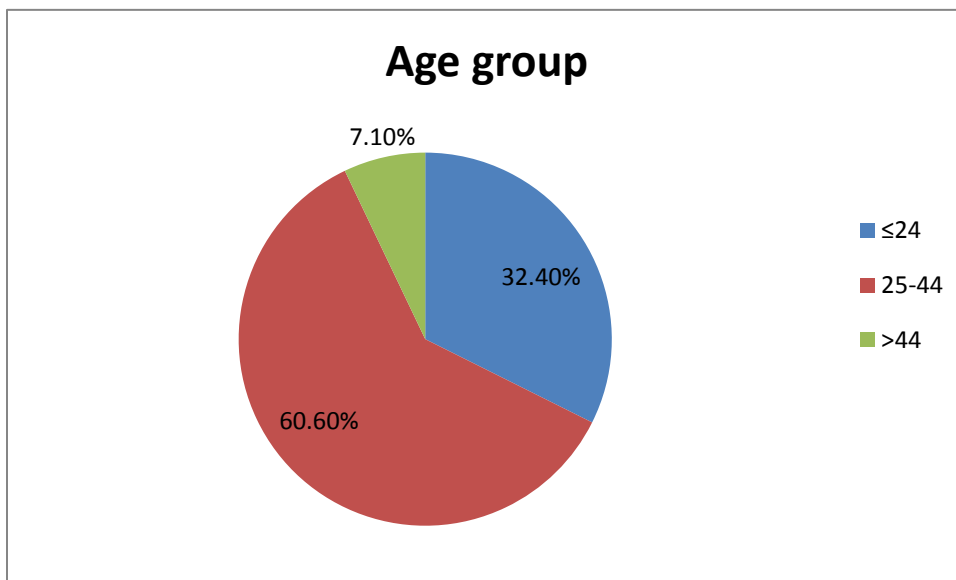


Figure 2: age distribution of the respondents

Concerning to their marital status nearly half 227(55.2%) were married and about two third 273(66.4%) of the participants completed their primary education. Regarding to their occupation, 210(51.1) and 83(20.2%) were farmers and daily laborers respectively. The Majority 349 (84.4%) had an average monthly income greater than 1200 Ethiopian birr (see **table1**).

Table 1: Socio-Demographic and Economic Characteristics of respondents among newly admitted prisoners of bench Maji zone correction center, Mizan Aman Ethiopia, 2019(N=411)

Variables	Category	Frequency No	Percentage %	ASPD	
				Yes N (%)	No N (%)
Age	18-24	133	32.4	50(37.50)	83(62.5)
	25-44	249	60.4	100(40)	149(60)
	>=45	29	7.1	21(72)	8(28)
Sex	Male	404	98.3	167(41.4)	237(59.6)
	female	7	1.7	4(57.2)	3(42,8)
Income	<1200	64	15.6	25(39)	39(61)
	>=1200	347	84,4	146(42)	201(58)
Ethnicity	Bench	208	50.6	90(43)	118(57)
	Sheko	63	15.3	12(19)	51(81)
	Amara	53	12.9	27(50.9)	26(49.1)
	Kefa	32	7.8	13(40)	19(60)
	Dizi	17	4.1	4(23.5)	13(76.5)
	Mnit	15	3.6	6(40)	9(60)
	Others	23	5.6	19(82)	4(18)
Marital status	Married	227	55.2	85(37.4)	142(62.6)
	Single	105	25.5	50(47.6)	55(52.4)
	Divorced	45	10.9	19(42.2)	26(57.8)
	Separated	29	7.2	15(51.2)	14(48.3)
	Widowed	5	1.2	2(40)	3(60)
Religion	Protestant	268	65.2	96(35.8)	172(64.2)
	Orthodox	135	32.5	69(51.1)	66(48.9)
	Muslim	7	1.7	6(85.7)	1(14.3)
	kalicha	1	0.2	0(00)	1(100)
Education	primary	273	66.4	109(39.9)	164(60.1)
	secondary & above	124	30.1	58(47)	66(53)

	unable to read write	14	3.4	4(28.5)	10(71.5)
Occupation	Farmer	210	51.1	72(34)	138(66)
	Daily laborer	83	20.2	43(51.8)	40(48.2)
	student	33	8	8(24.2)	25(75.8)
	driver	25	6.1	17(68)	8(32)
	government employee	21	5.1	16(76)	5(23.4)
	unemployed	16	3.9	6(37.5)	10(62.5)
	Others	23	5.6	9(39)	14(60.1)

5.2. Prevalence of antisocial personality disorder

From the total participants the prevalence of anti-social personality disorder was 171(41.6%) with the 95% confidence interval from 37% to 46%. Among participants with ASPD, 88 (51.5%) were reconvicted prisoners. From the total ASPD prisoners 67(39%), 67 (39%) and 20 (12%) prisoners who committed stealing, homicide and fighting had ASPD respectively. From the total of 171 ASPD participants, 121 (70.8%) had positive family history of imprisonment. Out of participants with ASPD 133 (77.8%) used alcohol in the past three months before their current incarceration.

5.3. Criminal and prison related factors

All of the prisoners were convicted prisoners. About 247(60%) of prisoners were sentenced for 2 years and less and 31(7.5%) prisoners for lifelong. From the total participants 127(30.9%) of prisoners were reconvicted prisoners and 88(21.4%) had ASPD among reconvicted prisoners. Stealing 174(42.3%), murder 99(24.1%) and physical assault 74(18%) were the most common causes of imprisonment. Eight four (20.4%) prisoners reported that they were punished for their misconduct in their previous incarceration. More than one third from the total respondents 160 (38.9%) of respondents reported that they had family history of imprisonment and out of them 121(29.4%) had ASPD. **see table 2.**

Table 2 criminal and prison Characteristics of respondents among newly admitted prisoners of bench Maji zone correction center Mizan Aman, Ethiopia, 2019(N=411)

Variables	Category	Frequency	Percentage	ASPD	
				Yes N (%)	No N (%)
Prior prison	Once	73	17.8	52(71)	21(29)
	twice	42	10.2	33(78.5)	9(21.5)
	3 and above	12	2.9	12(100)	0(00)
	No at all	284	69.1	4(26)	210(74)
Reconviction	Yes	127	30.9	88(69)	39(31)
	No	284	69.1	83(29)	201(71)
Misconduct in Prior prison	Yes	84	20.4	69(82)	15(18)
	No	327	79.6	102(31.1)	225(68.9)
Family history Of prison	Yes	160	38.9	121(75.6)	39(24.4)
	No	251	61.1	50(19.9)	201(80.1)
Set fire	Yes	4	1	3(75)	1(25)
	No	407	99	168(41.3)	239(58.7)
Killing animal	Yes	4	1	2(50)	2(50)
	No	407	99	170(41.8)	237(58.2)
Crime type	Stealing	174	42.3	67(38.5)	107(61.5)
	Homicide	99	24.1	67(67.6)	32(32.4)
	Fighting	74	18	20(27)	54(73)
	Sexual assault	19	4.6	4(21)	15(79)
	Rape	17	4.1	6(35)	11(65)
	Robbery	13	3.2	3(23)	10(77)
	Double marriage	7	1.7	1(14.3)	6(85.7)
	Others	8	1.9	3(37.5)	5(62.5)

NOTE: Other crimes include; deforestation, illegal land ownership and political issues

5.4. Clinical related factors

Nearly one fourth from the total respondents 88 (21.4%) of the respondents reported that their family members had history of mental illness and follow up. 30 (7.3%) participants had treatment and follow up history of mental illness. 48(11.7%) of participants reported as they had chronic medical illness and they were on treatment and on follow up. Almost one third 130(31%) of participant had family history of alcohol use and among them 89(68.4%) had ASPD. (See table 3)

Table 3 clinical Characteristics of respondents among newly admitted prisoners of bench Maji zone correction center Mizan Aman Ethiopia, (N=411), 2019.

Variables	Category	Frequency	Percentage	ASPD	
				Yes N (%)	No N (%)
History of Mental illness	Yes	30	7.3	20(66.6)	10(34.4)
	No	381	92.7	151(39.6)	230(60.4)
Physical illness	Yes	48	11.7	28(58.3)	20(41.7)
	No	363	88.3	143(39)	220(61)
Personality Treatment	Yes	9	2.2	8(88.9)	1(11.1)
	No	402	97.8	163(40.5)	239(59.5)
known family mental Illness	Yes	88	21.4	67(76)	21(24)
	No	323	78.6	104(32)	219(68)
Family history Of alcohol	Yes	130	31.6	89(68.4)	41(31.6)
	No	281	68.4	82(29)	199(71)

5.5. Substance related factors

Half of the respondents 209(50.9%) participants ever used alcohol and among them 136(65%) had ASPD. About half of respondents 203(49.4%) used alcohol over the past three months and among them 133(65%) had ASPD and from the total respondents 152(37%) were high risk alcohol users and from high risk alcohol users 110(72.3%) had ASPD. Less than one fourth 86(20.9%) participants used tobacco over the past three months and from the total respondents 56(13.6%) were high risk tobacco users. Around one fourth 91(22.1%) participants used khat

over the past three months and from the total respondents 65(15.8%) were high risk khat users. (See table 4).

Table 4 substance Characteristics of respondents among newly admitted prisoners of bench maji zone correction center Mizan Aman Ethiopia, (N=411), 2019

Variables	Category	Frequency	Percentage	ASPD	
				Yes N (%)	No N (%)
Risk alcohol Use	High risk	152	37	110(72.3)	42(27.7)
	Moderate	17	4.1	8(47)	9(53)
	Low risk	35	8.1	15(42.3)	20(57)
	Non risk	207	50.1	38(18)	169(82)
Risk tobacco Use	High risk	56	13.6	40 (71.4)	16(28.6)
	Moderate	20	4.9	15(75)	5(25)
	Low risk	10	2.4	7(70)	3(30)
	Non risk	325	79.1	109(33.5)	216(66.5)
Risk khat use	High risk	66	16.1	47(71.2)	19(28.8)
	Moderate	2	0.5	1(50)	1(50)
	Low risk	24	5.8	12(50)	12(50)
	Non risk	319	77.6	111(34.8)	208(65.2)
Current Alcohol use	Yes	203	49.4	133(65.5)	70(34.5)
	No	208	50.6	38(18.2)	170(82.80)
Current Tobacco use	Yes	86	20.9	62(72)	24(28)
	No	325	79.1	109(33.5)	216(66.5)
Current khat Use	Yes	91	22.1	59(65)	32(35)
	No	320	77.9	112(35)	208(65)
Ever alcohol Use	Yes	209	50.9	136(65)	73(35)
	No	202	49.1	35(17.3)	167(82.7)
Ever tobacco Use	Yes	85	20.7	62(72.9)	23(27.1)
	No	326	79.3	109(33.4)	217(66.6)
Ever khat Use	Yes	91	22.1	59(64.8)	32(35)
	No	320	77.9	112(35)	208(65)

5.6. Environmental related factors

About half of respondents 215(52.3%) had poor social support and among them 120(55.8%) had ASPD. From the total participants 265 (64.5%) of respondents had experienced 2 or more traumatic life event in their life time and among them 145(54.7%) had ASPD. Regarding to the childhood family conflict, nearly one fourth 97(23.6%) had experienced childhood family conflict. Concerning to the maltreatment, about two third of the respondents 123(29.9%) had multiple childhood maltreatment among them 100(81.3%) had ASPD. (See table 5)

Table 5 environmental Characteristics of respondents among newly admitted prisoners of bench maji zone correction center Mizan Aman Ethiopia, (N=411), 2019

Variables	Category	Frequency	Percentage	ASPD	
				Yes N (%)	No N (%)
Social support	Poor	215	52.3	120(55.8)	95(44.2)
	moderate	53	12.9	3(5.6)	50(94.4)
	good	143	34.8	48(33.6)	95(66.4)
Traumatic life Event	Multiple	265	64.5	145(54.7)	120(45.3)
	Only 1	28	6.8	5(17.8)	23(82.2)
	No trauma	118	28.7	21(17.8)	97(82.2)
Childhood Maltreatment	Multiple	123	29.9	100(81.3)	23(18.7)
	Only 2	162	39.4	57(35)	105(65)
	Only 1	12	2.9	3(25)	9(75)
	No at all	114	27.7	11(9.64)	103(90.36)
Excessive TV viewing	Yes	15	3.6	9(60)	6(40)
	No	396	96.4	162(40.9)	234(59.1)
family conflict	Yes	97	23.6	61(63)	36(37)
	No	314	76.4	110(35)	204(65)

5.7. Factors associated with antisocial personality disorder

The bi-variate analysis showed, various socio-demographic, criminal, clinical, substance and environmental related factors were found to be associated with antisocial personality disorder. Age, occupation, crime, family history of mental illness, reconviction , having mental illness , family history of alcohol use, risk alcohol use, risk tobacco use, childhood maltreatment, family history of prison, family history of conflict , traumatic life event , and social support were significantly associated with ASPD. (See table 6)

However ,multivariable logistic regression showed that six variables were positively associated with antisocial personality disorder; high risk alcohol users (AOR): 4.6, 95% CI,2.4-8.7),poor social support, (AOR): 3.5;95% CI(1.9-6.6), reconviction,(AOR): 2;95% CI,1.1-3.8),childhood maltreatment (AOR): 6,95% CI,2.2-17.5),family history of prison (AOR): 3;95% CI,1.5-6) and traumatic life event (AOR): 2.3;95% CI,(1.1-4.8).

high risk alcohol users were more than 4 times more likely to have ASPD than non-risk alcohol users (AOR): 4.6, 95% CI,2.4-8.7) .Also, prisoners with poor social support were more than 3 times more likely to have ASPD than prisoners with good social support (AOR): 3.5;95% CI(1.9-6.6) . Prisoners who convicted at least once before were 2 times more likely to have ASPD than prisoners with no prior prison history (AOR): 2; 95% CI, 1.1-3.8)

Prisoners who had multiple childhood maltreatment were nearly 6 times more likely to develop ASPD than prisoners without childhood maltreatment (AOR): 6,95% CI,2.2-17.5), Prisoners with family history of prison were about three times more likely to develop ASPD than prisoners without family history of prison (AOR): 3;95% CI,1.5-6) . In addition, prisoners who had exposure to multiple traumatic events were more than 2 times risk to have ASPD than prisoners with no traumatic life event exposure (AOR): 2.3; 95% CI, (1.1-4.8). (See table 6)

Table 6: Bi-variate and *multivariate logistic regression Analysis for independent predictors of antisocial personality disorder among newly admitted prisoners of bench maji zone correction center Mizan Aman Ethiopia, (N=411),2019.*

Variables	Category	ASPD		COR (95% CI)	P- values	AOR (95% CI)	P-values
		Yes No (%)	No No (%)				
Age	18-24	50(37.5)	83(62.5)	.23(.9-.55)	0.001*	0.5(.11-2.1)	0.345
	25-44	100(67)	49(33)	.26(.11-.60)	0.002*	0.8.2-3.12()	0.735
	>=45	21(72)	82(28)	1			
Occupation	Farmer	72(34)	138(66)	.8(.3-1.92)	0.644	0.6(.15.21)	0.386
	Unemployed	6(37.5)	10(62.5)	.9(.2-3.3)	0.918	1.6(.7-12)	0.603
	Daily laborer	43(51.8)	40(48.2)	1.6(.6-4.3)	0.285	0.9(.2.-3.7)	0.883
	Student	8(24.2)	25(75.8)	.5(1-1.58)	0.237	0.8(.16-4.4)	0.853
	Employed-	16(76.6)	5(23.4)	4.9(.1-18.1)	0.016	3(.45-20)	0.263
	Driver	17(68)	8(32)	3.3(1-10.3)	0.048	2(.3-12)	0.444
	others	9(39.9)	14(60.1)	1		1	
Social support	Poor	120(61)	95(39)	2.5(1.6-3.8)	0.000*	3.5(1.9-6.6)	0.000**
	medium	3(6)	50(94)	.11(0.03-0.4)	0.001*	0.2(0.04-0.94)	0.043**
	good	48(33.6)	95(66.4)	1		1	
family Mental illness	yes	67(76)	2124	0.15(0.08-0.3)	0.000*	1.3(.5-3.2)	0.500
	no	104(32)	219(68)	1		1	
History of Mental illness	Yes	20(66.6)	10(34.4)	0.33(.15-.75)	0.005*	1(.3-3.67)	0.968
	No	151(39.6)	230(60.4)	1			
Reconviction	Yes	88(69)	39(31)	5.4(3.4-8.6)	0.000*	2(1.1-3.8)	0.028**
	no	83(29.2)	201(70.1)	1		1	
Family history of Alcohol	Yes	89(68.4)	41(31.6)	5.2(3.3-8.2)	0.000*	1.7(.85-3.7)	0.128
	No	82(29)	199(71)	1			
Family history of prison	Yes	121(75.6)	39(24.4)	12(6.1-23.3)	0.000*	3(1.5-6.0)	0.01**
	No	50(19.9)	201(80.1)	1		1	

Childhood maltreatment	Multiple	100(81.3)	23(18.7)	12(6.1-23)	0.000*	6(2.2-17.6)	0.001**
	Only 2	57(35)	105(65)	3.5(.8-15.2)	0.093*	1.9(0.8-4.6)	0.121
	Only 1	3(25)	9(75)	3.1(.7-13.4)	0.123*	1.4(0.27-7.4)	0.672
	No at all	11(9.6)	103(90.4)	1		1	
Family history of conflict	Yes	61(63)	36(37)	.32(.22-.51)	0.000*	2(1-4)	0.05
	No	11035	20465	1			
Risk alcohol use	High risk	110(72.3)	42 (27.7)	11.6(7.1-19.2)	0.000*	4.6(2.4-8.7)	0.000**
	Moderate	8(47)	9(53)	3.9 (1.4-10.9)	0.008*	3.2(.87-11.6)	0.078
	Low risk	15(42.3)	20(57.7)	3.33(1.5-7.1)	0.002*	1.5(0.6-3.8)	0.402
	Non risk	38(18)	169(82)	1		1	
Traumatic life event	multiple	145(54.7)	120(45.3)	5.5(3.2-9.4)	0.000*	2.3(1.1-4.8)	0.026**
	1 trauma	5(17.8)	23(82.2)	1(.3-2.9)	0.994	1.5(0.39-6.0)	0.534
	No trauma	21(17.8)	97(82.2)	1		1	
Risk tobacco use	High risk	40(71.4)	16(28.6)	4.9(2.6-9.2)	0.000*	0.5(.2-1.6)	0.294
	Moderate	15(75)	5(25)	5.9(2-9.16.8)	0.000*	0.6(.1-3.2)	0.601
	Low risk	7(70)	3(30)	4.6(1-18)	0.001*	1.3(.2.7.1)	0.721
	Non risk	109(33.5)	216(66.5)	1		1	
Crime type	Stealing	67(38.5)	107(61.5)	1(0.2-4.5)	0.954	68(.3-1.6)	0.385
	fighting	20(27)	54(73)	0.6(0.1-2.6)	0.534	0.3(.04-1.7)	0.174
	rape	6(35)	11(65)	0.9(1.5-5.1)	0.915	1.1(.3-4.22)	0.920
	sexual assault	4(21)	15(79)	0.44(0.07-2.7)	0.379	2.1(1-4.5)	0.041
	homicide	67(67.6)	32(32.4)	3.5(.7-15)	0.101*	0.5(.09-2.85)	0.450
	robbery	3(23)	10(77)	0.5(0.07-3.4)	0.481	0.24(.02.2.8)	0.256
	double marriage	1(14.3)	6(85.7)	0.3(0.02-3.5)	0.326	1.1(.08-13)	0.991
	others	3(37.5)	5(62.5)	1		1	

Key *=p value<0.25, **= P value <0.05, 1= reference category

CHAPTER SIX: DISCUSSION

This cross-sectional study assessed the prevalence of antisocial personality disorder among newly admitted prisoners of Bench Maji zone correction center and its associated factors. According to this study the prevalence of antisocial personality disorder was 41.6 %.

This finding is in line with the study done in South Africa (46.1% ,N=193)(10) and another study done in England, wales, the prevalence of ASPD was (44.9%, N=496) (28).

Other cross- sectional study done in UK by using PCL-R among 53 prisoners, indicated that the prevalence of ASPD was 62 % (30). This is higher than current study. The reason could be due to their sociocultural difference and the study was not on newly admitted prisoners. Another study done in Nigeria by using Antisocial personality Disorder self-test, the prevalence of ASPD was (47 % ,N=300) among prisoners (11).Which is slightly higher than this study finding. The reason might be also due to tool difference and using a pee-test, post-test control group experimental design despite this study.

Another cross sectional study done in UK in Australia by using the Diagnostic Interview Schedule from a random sample of 495 sentenced inmates completed an interview shows that 56%, of them were with ASPD (29). This study is again higher than the current finding .The reason could be due to screening tool difference.

The current study finding is slightly higher than another cross-sectional study done in Iowa correction center in USA on 320 newly admitted prisoners whose prevalence of ASPD was (35.3%),The difference could be due to their difference in screening tool (23).A study performed on UK on pre-sentence prison population shows the prevalence of ASPD was (25.8% N=283) (25) which is lower than this study. The difference also might be due to using different tool to assess ASPD which is (International Personality Disorder Examination–Screening Questionnaire (IPDESQ), while this study used PCLR.

Being reconvicted had higher odds to have ASPD than prisoners with no prior prison history. This finding was in line with similar study done in Egypt where the prevalence of ASPD is two times more common in those who have repeated admission to prison (33) and the study done in Iowa USA (23).The reason might be due to people with antisocial personality disorder

frequently perform acts that result for arrest and they are unable to conform to social norms that commonly govern many aspects of person's adolescent and adult behavior(1) and their impulsion to commit crime is genetically oriented (3).Also, another reason might be due to antisocial personality disorder is linked to violence and crime that is why people with antisocial personality disorder are repeatedly sentenced and spend much of their time in imprisonment (5).In addition, prisoners with antisocial personality disorder took significantly less time to re-offend compared with those without such co-morbidity (30).

High risk alcohol users were about 4 times more likely to have ASPD than non-risk alcohol users. This finding was in line with the study done in university of South Dakota United States (38) and University of Otego, Wellington, New Zealand (39) and also the study done on Iowa USA (23).The reason might be due to people with antisocial personality disorder have an irresponsible life style and they are impulsive to try new things like substance despite its consequence (12).

In this study, having poor social support had a higher odds of developing ASPD than prisoners with good social support and also having moderate social support was protective against antisocial personality disorder. A study done in Taiwan also revealed that ; lack of social support was significantly and positively associated with ASPD (45).The reason might be due to lack of any criticisms from nearby person, so that they continue their unacceptable behaviors (12). Another reason might be since they are Irresponsible; they can have significant difficulties in maintaining stable social relationship to fulfill their social and financial obligations. Moreover, it might be due to lack of someone who helps them when they were in problem and lack of someone who is rewarding and punishing them when they do socially acceptable and unacceptable behaviors respectively.

Prisoners who had multiple childhood maltreatment were 6 times more likely to develop ASPD than prisoners without childhood maltreatment. This finding was the same as the study done in south Carolina (44) in new york (47) and south Florida (43).The main reason might be due to childhood and adolescent large stress reactions are harmful and it reduces stress reactivity and enhances antisocial behavior(47).Moreover, antisocial personality disorder is the result of their social and cultural experiences of a person in childhood and adolescence encompassing their family dynamics, peer influences, and social values (4).

Prisoners with Family history of prison were three times more likely to develop antisocial personality disorder than prisoners with no family history. This study was in line with the same study done in Finland (42). The reason could be due to Antisocial Personality disorder is caused by a combination and interaction of genetic and environmental influences. Genetically, it is the intrinsic temperamental tendencies as determined by their genetically influenced physiology and it runs around the family (4).

In this study, Prisoners with traumatic life event exposure were significantly and positively associated with antisocial personality disorder than prisoners with no history of trauma. This finding was the same as the study done in new york (47) and south Florida (43).The main reason might be due to people with antisocial personality disorder are vulnerable to traumatic injuries, accidents, homicide, and suicide attempts, as result of their impulsive, aggressive and risky behaviors (15). Another reason might be, those with antisocial personality disorder are often impulsive and reckless, failing to consider or disregarding the consequences of their actions. They may repeatedly disregard and jeopardize their own safety and the safety of others and place themselves and others in danger (4).

Limitation of the study

Interviewer bias, recall bias, and Underreport and denial of criminal activities and substance use. Few numbers of women and it is difficult to generalize for women offenders. Prisoner's mental and medical illness is not confirmed by medical record. This study is on newly admitted prisoners and may not be generalized to prisoners stayed in the prison. Moreover, the ASPD diagnosis was based on interview and file review and it lacks collateral information.

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

7.1. Conclusion

This study found high prevalence of antisocial personality disorder among newly admitted prisoners of Bench maji zone correction center. Reconviction, risky alcohol use, family history of prison, childhood maltreatment, traumatic life event and poor social support were positively associated with antisocial personality disorder. In general, despite high prevalence of antisocial personality disorder and its negative consequences, prisoners did not report any treatment given in prison institution as well as in community set up. These findings present a great need for an establishment of mental health awareness and services at correctional center.

7.2. Recommendation

Based on this study finding, the following recommendations were recommended,

- **For bench maji zone correctional center administration and clinic:**
 - ✓ to train staffs and screen all new prisoners at reception for antisocial personality disorder and risk alcohol users and refer them to mizan tepi university teaching hospital for better management.
- **For mizan tepi university teaching hospital and psychiatry unit**
 - ✓ To train staffs and provide CBT (group based enhanced thinking skill therapy to reduce recidivism, anger, to enhance interpersonal problem solving skills and to reduce other social deviant behaviors) for prisoners with ASPD.
 - ✓ To train staffs and to detoxify those with risk alcohol users to prevent alcohol withdrawal complications and provide them with motivational interview.
- **For bench maji zone administration to inform**
 - ✓ **For family and community members:** to provide good social support by strengthening their existing social networks and encouraging them to have new social networks like idir, religious institution and others if any.
 - ✓ **For community:** it is better to work on reducing the occurrence of traumatic life event by resolving conflict by negotiation by using religious and community leaders.
 - ✓ **For parents:** to avoid harsh childhood punishment of their children and to protect their children from sexual and psychological abuse.

- **For bench maji zone correction center:** it is better if prisoners family members to be involved in the intervention.
- **For researchers,** further research is also recommended to generalize to other prison centers throughout Ethiopia and to identify Cause effect relationship between ASPD and associated factors that may strengthen the current finding.

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Annexes

Participants' information sheet and consent form

Title of the research: anti-social personality disorder and associated factors among newly admitted prisoners at Bench Maji zone correctional center, Mizan Aman, Ethiopia, 2019

Name of the principal investigator: ASRAT WOLDE

Name of the organization: JIMMA University, institute of health, Department of Psychiatry.

Name of the sponsor: Jimma University

Introduction- This study is aimed to assess the prevalence of antisocial personality disorder and its associated factors among newly admitted prisoners at Bench Maji zone correctional center. Given the impact of antisocial personality disorder on prisoners and its associated factors, the need to assess the prevalence of occupational stress is mandatory. In addition the study also has the objective to identify factors which affect antisocial personality disorder among prisoners.

Procedure: I invite you to participate in this project. If you are willing to participate in this project, you need to understand and sign the agreement form.

Risk/Discomfort: There is no risk in participating in this research project. We hope you will participate in the study for the sake of the benefit of the research result.

Benefits: If you participate in this research project, there may not be direct benefit to you, but your participation is helpful us to meet the research objective.

Incentives: No incentive or payment will be provided for you to take part in this project.

Confidentiality: The information collected for 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, but code number assigned to it. It will not be revealed to anyone except the principal investigator and it will be kept secured.

Right to refuse or withdraw: You have full right to refuse from participating in this research. You can choose not to respond to some or all questions if you do not want to give your response. You have also full right to withdraw from this study at any time you wish without losing any of your right.

Person to contact: This research project will be reviewed and approved by intuitional review board of Jimma University and if you have any question you can contact any of the following individuals and you may ask at any time you want.

1. Asrat wolde phone - 0916389179 e-mail:Asratwolde2017@gmail.com
2. Mr. yimenu Yitayi phone-0921130353
3. Mr.yonas Tesfaye phone-0910107507

English version consent form

Dear Participants:

Code No: _____

My name is -----; I am hereby in the behalf of Asrat wolde who is a student undertaking a Master's degree in Mental Health in Jimma university. One of the requirements for the degree is to conduct a research project. This letter serves to ask consent from you to take part in this research. Studies in other countries shows prisoners has suffered from mental disorders especially antisocial personality disorder which needs treatment and results with repeated incarceration and poor social functioning but assessing individuals for antisocial personality disorder in correctional center is poor as a result they missed opportunities for psychiatric and psychological interventions. The purpose of this study is to assess the prevalence and associated factors of antisocial personality disorder among prisoners which will be input for policy makers and institutions involved in assessment and treatment for antisocial personality disorder. Your participation in this research is voluntary. If you decide not to participate there are no negative consequences for you. Your participation on this study is very important for achievement of the study and for providing information mental health service in correctional centers thereby decreasing recidivism, violence, and substance use on the prison population. There is no any risk that will come to you because of your participation in this study. 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. The interview period will take about 30 minutes. If you are willing to participate in this study, you need to understand and sign the agreement form, and then you will asked to give your responses by data collectors.

Name of investigator: Asrat wolde tel. 0916389179

Are you voluntary to participate in the interview? Yes

No

Signature _____

Written Consent form

I hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participate voluntarily in the research project. I understand that I am at autonomy to withdraw from the project at any time.

Signature of participant _____ Date _____

Name and signature of data collector _____ Date _____

Name and signature of Supervisor _____ Date _____

Annex I: English version questionnaire

Part 1, Socio demographic information

NO	Variables		Code
1	How old are you	Age in years _____	
2	Sex	Male	
		Female	
3	What is your ethnicity	Bench	
		Amara	
		Oromo	
		Other _____	
4	What is your marital status	Single	
		Married	
		Separated	
		Widowed	
		Divorced	
5	What is your religion	Orthodox	
		Muslim	

		Protestant	
		Catholic	
		Other _____	
6	What is your level of education?	Unable to write and read	
		Primary	
		Secondary	
		Tertiary and above	
7	What is your occupational status	Unemployed	
		Government employed	
		Daily laborer	
		Student	
		Others _____	
8	Crime type _____		
9	Monthly income		

Part 2, to assess social support

NO	Social Support Questionnaire	Response
1	How many people are so close to you that you can Count on them if you have serious personal problems (choose one option)?	1.None 2.1 or 2 3.3-5 4.More than 5
2	How much concern do people show in what you are doing (choose one option)?	1. No concern and interest 2.Little concern and interest 3. Uncertain

		4. some 5. a lot
3	How easy is it to get practical help from friends or dorm-mates' if you should need it (choose one option)?	5. Very easy 4. Easy 3. Possible 2. Difficult 1. Very difficult

Part 3, Psychopath checklist-revised

If it does not apply choose **0** , If it applies somewhat choose **1** and if it fully applies choose **2**

NO	Item	0(not apply)	1(Somewhat apply)	2(Fully applies)
1	Glibness/superficial charm			
2	Grandiose sense of self-worth			
3	Need for stimulation/ proneness to boredom			
4	Pathological lying			
5	Conning/manipulative			
6	Lack of remorse or guilty			
7	Shallow affect			
8	Callous/lack of empathy			
9	Parasitic life style			
10	Poor behavioral controls			
11	Sexual promiscuity			
12	Early behavioral problem			

13	Lack of realistic long- term goals			
14	Impulsivity			
15	Irresponsibility			
16	Failure to accept responsibility for own actions			
17	Many short- term marital relation ship			
18	Juvenile delinquency			
19	Revocation of conditional release			
20	Criminal veracity			

Part 4: criminal and Clinical factors questions.

1. Have you ever been convicted before? 1. Yes 2.no
2. If your answer is yes for the above question how many times had you convicted
 1. Once
 2. Twice
 3. Triple times
 4. Other
3. Have you ever punished for misconduct in prison? 1. Yes 2.no4. If yes, how many times? _____
4. For how many years you sentenced? _____
5. Have you ever set a fire? _____
6. Have you tried to kill animals or killed when you were child? _____if so, how often?_____
7. Have you had any psychiatric treatment in hospital? 1. YES 2.No
8. Is there anyone in your family who has mental illness? 1. Yes 2.no
9. Is your father or mother drinks alcohol? 1. Yes 2.no
10. Have you ever treated for your personality problem? 1. Yes 2.no

11. Have you had chronic physical illness? 1. Yes 2.no

12. If yes specify-----

13. Have you ever violated the rights of others since age 18? 1. Yes 2.no

Part 5(501) substance use assessment

Ever use

NO	In your life which of the following substance have you ever used	NO	YES
1	a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	1
2	Alcoholic beverages (beer, wine, spirits, etc.)	0	1
3	Amphetamine type stimulants (khat, speed, ecstasy, etc.)	0	1
4	Cannabis (marijuana, pot, grass, hash, etc.)	0	1
5	Others substances		

Current use

NO	In the past 3 months how often have you used the mentioned substance?	NO	YES
1	a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	1
2	Alcoholic beverages (beer, wine, spirits, etc.)	0	1
3	Amphetamine type stimulants (speed, diet pills, khat, ecstasy, etc.)	0	1

4	Cannabis (marijuana, pot, grass, hash, etc.)	0	1
5	Others substances		

Part 6; Environmental factors

1. Have you had Excessive childhood /adolescent television viewing? 1. Yes 2.no
2. If yes, how many hours per day and per week? -----
3. Was there any family conflict when you were a child? 1. Yes 2.no

Part 7.questions for life event,

1. Happened to you 2.you witnessed by others 3.learned when happened to close family members
- 4.not sure 5.doesnot apply

1. Natural disaster, (1), (2) (3) (4) (5)
2. Fire or explosion (1), (2) (3) (4) (5)
3. Transportation accident, (1), (2) (3) (4) (5)
4. Series accident, (1), (2) (3)(4) (5)
5. Exposure to toxic substance, (1), (2) (3) (4) (5)
6. Physical assault, (1), (2) (3) (4) (5)
7. Assault with a weapon, (1), (2) (3) (4) (5)
8. Sexual assault, (1), (2) (3) (4) (5)
9. Exposure to war zone, (1), (2) (3) (4) (5)
10. Life threatening illness or injury,(1), (2) (3) (4) (5)
11. Sudden violent death, (1), (2) (3) (4) (5)
12. Sudden death of someone close to you, (1), (2) (3) (4) (5)
13. Series injury, harm or death you caused to others, (1), (2) (3) (4)(5)
14. Any other very stressful event, (1), (2) (3) (4) (5)

15. Series accident at work place, home and recreational place, (1), (2) (3) (4) (5)

16. Other unwanted or uncomfortable sexual experience. (1), (2) (3) (4) (5)

Part 8; for adverse childhood experience during your first 18 years of life.

1. Did a parent or other adult in the household often insult you?

Yes No

2. Did a parent or other adult in the household, slap, or throw something at you, ever hit you so hard that you had marks or were injured?

Yes No

3. Did an adult or person at least 5 years older than you had sex with you?

Yes No

4. Did you often feel that No one in your family loved you or thought you were important or special?

Yes No

5. Did you often feel that you didn't have enough to eat, wear dirty clothes; your parents were too drunk?

Yes No

6. Were your parents ever separated or divorced? Yes No

7. Was your mother or stepmother slapped, had something thrown at you, kicked, bitten, hit with a fist, or hit with something hard? Threatened with a gun or knife? Yes No

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

Yes No

9. was a household member depressed or mentally ill or did a household member attempt suicide?

Yes No

10. Did a household member go to prison? Yes No

የተሳታፊ ዝርዝር መረጃ እና የስምምነት ቅፅ

የተሳታፊ ዝርዝር መረጃ

የጥናት ርዕስ:- በቤንቺ ማጂ ማረምያ ቤት የታራሚዎች የስብእና መቃወስ መጠን እና ተያያዥነት ያላቸውን ነገሮች መመርመር.

የጥናቱ ባለቤት ስም:- አስራት ወልደዬ -- 0916389179

የድርጅቱ ስም- በጂማ ዩኒቨርሲቲ፣ የሕክምናና ጤና ሳይንስ ኢንስቲትዩት የሥነ-አእምሮ ሕክምና ት/ክፍል

ወጪውን የሚሸፍን - ጂማ ዩኒቨርሲቲ፣

መግቢያ:-ይህ ጥናታዊ ጽሑፍ በማረምያ ቤት ታራሚዎች ዘንድ ያለውን የስብእና መቃወስ መጠን እና ተዛማጅነት ነገሮች ለመገምገም የታቀደነው። በማረምያ ቤት ውስጥ የሚገኙ ታራሚዎች የስብእና መቃወስ ምንም ዓይነት ተጽዕኖ እንደሚያሳድር ለማወቅ የየስብእና መቃወስ መጠን ማወቅ ወሳኝ ነው። በተጨማሪም ጥናቱ በታራሚዎች የስብእና መቃወስ የሚፈጥሩ ምክንያቶች የመለየት ዓላማ አለው።

ሂደት:-በዚህ ጥናት ውስጥ እንዲሳተፉ እጋብዛችኋለሁ። በዚህ ጥናት ለመሳተፍ ፈቃደኛ ከሆኑ፣ የስምምነት ቅጹን መረዳትና መፈረም ያስፈልግዎታል።

ሊደርስ የሚችል ጉዳት :- በዚህ የምርምር ጥናት ውስጥ በመሳተፍ ምንም ዓይነት ጉዳት የለውም። ለጥናቱ ውጤታማነት እንደሚሳተፉ ተስፋ እናደርጋለን።

ጥቅሞች:-በዚህ የምርምር ጥናት ላይ ከተሳተፉ ቀጥተኛ ጥቅም ላይ ሳይገኙ ይችላሉ፤ ነገር ግን የእርስዎ ተሳትፎ ምርምር አላማውን እንድናሟላ ይረዳናል።

ማበረታቻዎች:- በዚህ ጥናት ተሳታፊ በመሆንዎ ምንም ዓይነት ክፍያ አይሰጥዎትም።

ሚስጢራዊነት:-ለዚህ ጥናት የሚሰበሰበው መረጃ የግል ጉዳዮችም ያካተተ በመሆኑ ሚስጥሩ የተጠበቀነው። ለዚህም ሲባል በመጠይቁ ስምም ሆነ መታወቅያ ቁጥር መፃፍ አያስፈልግም።

ያለመሳተፍ ወይም የማቋርጥ መብት:-በዚህ ጥናት ያለመሳተፍ መብት ሙሉ በሙሉ የተጠበቀነው። ለጥያቄዎች በሙሉ ወይም በከፊል መልስ አለመስጠት ይቻላል።

መግኘት የሚችሏቸው ሰዎች: ይህ የምርምር ጥናት ጂማ ዩኒቨርሲቲ የምርምር እና የሥነምግባር ቦርድ እና በየሥነምግባር ኮሚቴ ተከልሶ የሚፀድቅ ስለሆነ ማናቸውም ጥያቄ መጠየቅ ይችላሉ። የበለጠ መረጃ ለማግኘት ከፈለጉ በሚከተሉት አድራሻዎች መጠየቅ ይችላሉ።

1. አስራት ወልዴ ስልክ/ቁ - 0916389179ኢ.ሜል-Asratwolde2017@gmail.com
2. ይመኑ ይታይህ ስልክ/ቁ- 0921130353
3. ዮናስ ተስፋዮ ስልክ/ቁ- 0910107507

የአማርኛስምምነትወል

እኔ አቶ _____ እባላለሁ ። የአቶ አስራት ወልዴ በጂማ ዩኒቨርሲቲ፣ የሕክምናና ጤና ሳይንስ ኢንስቲትዩት የሥነ-አእምሮ ሕክምና ት/ክፍል መካከል በሚሰጠው የሁለተኛ ዲግሪ ፕሮግራም የስነ አእምሮ ሕክምና ትምህርታቸውን በመከታተል ላይ ይገኛሉ። ስለሆነም የመመረቂያ ዕቃዎቻቸውን በስብእና መታወክ እንዲሁም ተያያዥነት ያላቸው ነገሮች በሚል ርዕርስ ዙሪያ ጥናት እያካሄዱ ይገኛሉ። በሌሎች ሃገሮች የተሰሩ ጥናቶች እንደሚያመለክቱት በማረምያ ቤት የሚገኙ በስብእና መታወክ ችግር በመጠቃታቸው በተደጋጋሚ ለእስር ይዳርጋቸዋል።ይህም የሚሆነው ችግሩ ካለመታወቅና ተገቢውን የስነ-ልቦና እና የስነአእምሮ ሕክምና ካለማግኘት ነው።የዚህ ጥናት ዓላማም የጉዳዩን ስርጭት እና ተጓዳኝ ነገሮችን በመገምገም ነው።ይህም የስብሀና መታወክ በሽተኞች እንክብካቤ እና ድጋፍ ላይ ተሳትፎ ለሚያደርጉ ፖሊሲ አውጪዎች እና ተቋማት ወሳኝ ግብዓት ይሆናል። በዚህ ምርምር ውስጥ ያለዎት ተሳትፎ በፈቃደኝነት ላይ የተመሰረተነው።ይህ ደብዳቤ በዚህ ጥናት ላይ ለመካፈልዎ ፍቃድ ለመጠየቅ ያገለግላል።እርስዎ የዚህ ጥናት ተሳታፊ በመሆንዎ በጣም እናመሰግናለን። ለመሳተፍ ፈቃደኛ ካልሆኑ በእርስዎ ላይ የሚደርስ አንዳችም አሉታዊ ነገር የለም።የርስዎ ተሳትፎ ግን በጥናቱ ተጎዷዎች እንክብካቤ ውስጥ የሚደረገው ስነ-ልቦናና ስነአእምሮ ሕክምና እድገት እና ወህደት በጣም ጠቃሚ ነው። የሚሰጡት ማንኛውም መረጃ በሚስጥር ይያዛል። የእርስዎን ስም ወይም ስልክ ቁጥር መስጠት አይጠበቅብዎትም።እርስዎን የሚገልፅ ማንኛውም መረጃ ለሌላ አካል አሳልፎ አይሰጥም።እርስዎ የማይፈልጉ ከሆነ ጥያቄዎችን በከፊል ወይም በሙሉ ያለመመለስ መብትዎ የተጠበቀ ነው።ቃለ-መጠይቁ ቢበዛ 30 ደቂቃ ይወስዳል።ለመሳተፍ ፈቃደኛ ከሆኑ መረዳትና የስምምነት ቅጹ ላይ መፈረም አለብዎት።

የጥናቱባለቤትስም:አስራት-ወልዴ.ስልክ/ቁ- 0916389179ኢ.ሜል-Asratwolde2017@gmail.com

በቃለ-መጠይቁ ላይ ለመሳተፍ ፈቃደኛ ኖት? አዎ አይደለሁም

ፊርማ _____

Amharic version questionnaires

መመርያ, 1 ፤ ይህመጠይቅ 8 ክፍሎች አሉት። መጠይቁን ለመሙላት በአማካይ 30 ደቂቃ ይወስዳል እባክዎ ሁሉን ምጥያቄዎች ለመመለስ ይሞክሩ.ለትብብርዎበቅድሚያእናመሰግናለን።

ክፍል-1 -የማህበራዊ አኗኗር መረጃዎች

ተ.ቁ	መጠይቅ		
1	ዕድሜ	_____ ዓመት	
2	ፆታ	ወንድ	
		ሴት	
3	ብሄር	ትግራዊ	
		አማራ	
		አሮሞ	
		ሌላ/ሌላው _____	
4	የጋብቻ ሁኔታ	ያላገባ/ች	
		ያገባ/ች	
		ተለያይቶ/ታ የሚኖር/የምትኖር	
		የፈታ/ች	
		የሞተበት/ባት	
5	ሃይማኖት	ኦርቶዶክስ	
		እስላም	
		ፕሮቴስታንት	
		ካቶሊክ	
		ሌላ/ሌላው _____	
6	የትምህርት ሁኔታ		

7	የስራ ሁኔታ		
8	የፈጠራ ወንጀል		
9	ወርሀ ዊገቢ		

ክፍል:2.(201) የማህበረሰብ ድጋፍን ለመለየት የሚያገለግሉ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መልስ
1	ከባድ የግል ችግር ቢያጋጥምም በእነሱ ላይ የሚተማመኑባቸው ለእርስዎ በጣም ቅርብ የሆኑ ስንት ሰዎች ካጠገብዎት ሊሆኑ ይችላሉ (አንዱን ይምረጡ)?	1. ምንም 2.1 ወይም 2 3. 3-5 4. ከ5 በላይ
2	እርስዎ በሚያደርጉት ነገር ውስጥ ሰዎች ምን ያህል ትኩረት ያሳያሉ (አንዱን ይምረጡ)?	1. ምንም 2. በጣም ጥቂት 3. አይታወቅም 4. የተወሰኑ 5. በጣም ብዙ
3	በፈለጉ ጊዜ ከጋደኛዎ ወይም ከጎረቤትዎ እርዳታ ለማግኘት ለእርስዎ ምን ያህል ቀላል ነው (አንዱን ይምረጡ)?	5. በጣም ቀላል ነው. 4. ቀላል ነው. 3. ማግኘት ይቻላል 2. አስቸጋሪ ነው. 1. በጣም አስቸጋሪ ነው.

ክፍል 3 (301)የሳይኮፓቲክ ቼክሊስት ሪቫይዥና መመዘኛ

የሚከተሉትን የባህሪ ዝርዝሮች ተመልክተው ከራስዎ ባህሪ በማስተያየት ከፊት በተገለፁት ቁጥሮች በተገለፀው ልክ መስረት ደረጃ ያውጡላቸው

1. በፍፁም/አይደለም/አይመለከተኝም
2. አንድአንድ/በመጠኑ/ይታይብኛል
3. በጉልህ/በብዛት/ይታይብኛል

ተ.ቁ		0	1	2
01	አፈጮሌነት እና ማራኪ ገዕታ			
02	ከልክ በላይ ራስን ከፍ አድርጎ ማየት			
03	ለሚሰሩት ማነሳሻ መፈለግ/ በራስ ተነሳሽነት ማጣት /ስሉቱነት			
04	የመዋሽት አባዜ (ውሽታምነት)			
05	ብለጣብልጥነት /ለራስ ጥቅም ሰዎችን መጠቀምያ ማድረግ			
06	የወንጀለኝነት /ጥፋተኝነት ስሜት ማጣት			
07	ከአንገት በላይ በሆነ ሁኔታ ስሜትን መግለፅ			
08	ሌሎችን እንደራስ አለማየት			
09	ጥገኝነት ላይ የተመሰረተ ኑሮ			
10	በቀላሉ ቁጡ መሆንና ለፀብ መጋበዝ			
11	ብዙ የወሲብ ጓደኛ መያዝ (ዘማውነት)			
12	የልጅነት የባህሪ ችግር መኖር/ከ10 ዓመት በታች/			
13	የ ረጅምጊዜ ዓላማ/ግብ/ አለመኖር(ዓላማቢስነት)			

14	ስሜትን መቆጣጠር አለመቻል (ግልፍተኝነት)			
15	የሃላፊነት ስሙት መገደል			
16	ለራስ ድረጊት ሃላፍነት አለመውሰድ አለመውሰድ			
17	ብዙና ለአጭርጊዜ የቆየ ጋብቻ መመስረት			
18	በወጣትነት ዕድሜ በ ጥፋት መጠይቅ ወይም መከሰስ			
19	በአመክሮ መለቀቅን የሚያሳጣ ድርጊት መፈፀም			
20	በብዙ ወኝጆሎች መሳተፍ			

ክፍል 4 (401) የአእምሮ ህመም ስለመኖሩ እና ወኝጆሎችን የተመለከተ

1. ከአሁን በፊት የጥፋተኝነት የተሰጠበት ክስ አለ?

- 1. አዎ
- 2. የለም

2. ካለ ስንት ጊዜ ተከሰው ተፈርዶባቸው ያውቃሉ?

- 1. አንድ ጊዜ
- 2. ሁለት ጊዜ
- 3. ሶስት ና ከዝያባላይ

3. በእስር ቤት እያሉ በስነምግባር ጥሰት ተቀጥተው ያውቃሉ?

4. ለስንት አመት ነው የተፈረደባቸው? -----

5. ልጅ እያሉ እሳት ሰደው ያውቃሉ? 1) አዎ 2) አይደለም

6. ልጅ እያሉ እንስሳትን ገለው ያውቃሉ? 1. አዎ 2. አይደለም

7. ለአእምሮ ህመም በሆስፒታል ታክመው ያውቃሉ?

1. አዎ 2. አይደለም

8. በቤተሰቦ ውስጥ የአእምሮ ህመም ያለው ሰው አለ? 1.አዎ 2. አይደለም

9. አባትህ/አናትህ አልኮል (ቢራ ፣ጠላ ፣አረቄናወይን)ይጠግሉ?

1. አዎ 2. አይደለም

10. ለሲብሊን መቃወሥ ታክመው ያውቃሉ? 1. አዎ 2. አይደለም

11. የቆየ የአካላዊ በሽታ አለቦት? 1. አዎ 2. አይደለም

12. አዎ ካለ ያብራሩ-----

13. ከ 18 ዓመት ጀምሮ የሌሎች ሰዎችን መብት እና የአካባቢ ደንቦችን ጥሶው ያውቃሉ?

1. አዎ 2. አይደለም

ክፍል 5 የእዕመጠይቅ

1)

ተ.ቁ	በህይወት ዘመንዎ ከሚከተሉት የትኛውን ተጠቅመው ያውቃሉ?	አዎ	አለተጠቀመኩም
1	ትምባሆ (ሲጋራ ወይም የሚታኘክ)	0	1
2	አልኮል መጠጦች (ቢራ፣ጠላ፣አረቄ፣ወይን)	0	1
3	የሚያነቃቃ (ጫት)	0	1
4	ካናቢስ ወይም ማሪዋና	0	1
5	ሌላ ካለ ይጥቀሱ	0	1

2)

ተ.ቁ	በባለፉት ሶስት ወራት ለምን ያህል ጊዜ ከላይ የተጠቀሰውን እጽ ተጠቅማል? (0) አልተጠቀምኩም (2) አንዴ / ሁለቴ (3) በወር አንዴ (4.) በሳምንት አንዴ (5.) በየቀኑ		
1	ትምባሆ (ሲጋራ ወይም የሚታኝክ)	0 1 2 3 4 5	4 5
2	አልኮል መጠጦች (ቢራ፣ ጠላ፣ አረቄ፣ ወይን)	0 1 2 3	4 5
3	የሚያነቃቃ (ጫት)	0 1 2 3	4 5
4	ካናቢስ ወይም ማሪዋና	0 1 2 3	4 5
5	ሌላ ካለ ይጥቀሱ	0 1 2 3	4 5

ክፍል 6 አካባቢው ጋር ተያያዥነት ያላቸው መጠይቅ

1. በእፃንነቱ ጊዜ ለረጅም ጊዜ ቴሌቪዥን ያያሉ? 1. አዎ 2. አይደለም
2. አዎ ካሉ ምን ያህል ጊዜ በቀን ----- በሳምንት -----?
3. እፃን ሆኖ እያሉ በቤተሰብ ውስጥ ብዙ ጊዜ ጭቅጭቅ ነበረ? 1. አዎ 2. አይደለም

ክፍል 7 የሂይወት ክስተት መጠይቅ

- (1) በእርሶ የደረሰ (2) በሰው ሲደርስ የተመለከቱት (3) ለቅርብ ዘመድ ሲደርስ የሰሙት (የተማሩት) (4) እርግጠኛ አይደለሁም (5) አይመለከተኝም
1. የተፈጥሮ አደጋ (የመሬት መንቀጥቀጥና ጎርፍ) (1) (2) (3) (4) (5)
 2. የእሳት አደጋ (1) (2) (3) (4) (5)
 3. የመጓጓዣ አደጋ (የመኪና የጀልባና የአሮፕላን) (1) (2) (3) (4) (5)
 4. በቤት በስራ ቦታ እና በመዝናኛ ቦታ የደረሰ አስቃቂ አደጋ
(1) (2) (3) (4) (5)
 5. ለመርዛማ ኬሚካል መጋለጥ (ጨረር , መጥፎ ኬሚካል)
(1) (2) (3) (4) (5)
 6. የአካላዊ ጥቃት (መመታት) (1) (2) (3) (4) (5)
 7. በመሳሪያ መቀሰል(ቦምብ ፣ ሽጉጥ ፣ ቢላዋ) (1) (2) (3) (4) (5)
 8. ወሲባዊ ጥቃት (ጠለፋ አስገድዶ መድፈር) (1) (2) (3) (4) (5)
 9. ሌሎች ያልተፈለጉ ወሲባዊ ጥቃቶች (1) (2) (3) (4) (5)
 10. የጦርነት ቦታ መሄድ (1) (2) (3) (4) (5)
 11. ታፍኖ መወሰድ (1) (2) (3) (4) (5)
 12. አስቃቂ አካላዊ በሽታና ጉዳት (1) (2) (3) (4) (5)
 13. ድንገተኛ ሞት (እራስን ማጥፋት ሌላውን መግደል)
(1) (2) (3) (4) (5)
 14. ድንገተኛ ያልተጠበቀ የቅርብ ሰው ሞት (1) (2) (3) (4) (5)
 15. አደገኛ ጥቃትና ሞት በሌሎች ሰዎች ላይ ማድረስ
(1) (2) (3) (4) (5)

ክፍል 8 አግባብ ያልሆኑ የልጅነት ግዜ መጠይቅ

1. ወላጆች ወይንም ሌሎች ወጣቶች ይሰደቡት ነበረ? 1. አዎ 2. አይደለም
2. ወላጅነት ወይንም ሌሎች ወጣቶች ቤት ወስጥ ይመታዎት ፣ ያቆሰሉበት ቦታ አለ?
1. አዎ 2. አይደለም
3. ቢያንስ ከእርሶ በአምስት አመት የሚበልጥ ሰው ከእርሶም ጋር ወሲብ ይፈጽም ነበረ?

1. አዎ 2. አይደለም

4. ማንም እንደማይወድት ይሰማዎት ነበር? 1. አዎ 2. አይደለም

5. በቂ የሚባል ምግብ አለመኖር ቆሻሻ ልብስ መልበስ እና ጠጪ የቤተሰብ አባል ነበሮዎት? 1. አዎ 2. አይደለም

6. ወላጆች ተፋታል ወይም ተለያይተዋል? 1. አዎ 2. አይደለም

7. እናቶ ወይንም የእንጀራ እናቶ ይገርፈውት ነበር (በቢላዎ, በሽጉጥ) ያስፈራራዎት ነበር? 1. አዎ 2. አይደለም

8. አልኮል ከሚጠጣ ሰው ጋር ወይንም ሌሎች እያችን ከሚጠቀሙ ሰው ጋር ኖረዋል?

1. አዎ 2. አይደለም

9. የቤተሰብ አባሎት የድብርት በሽታ የአህምሮ ህመምና እራሱን ያጠፋ /ለማጥፋት የሞከረ ነበረ? 1. አዎ 2. አይደለም

10. ከቤተሰብ አባል ውስጥ እስርቤት የገባ ሰው ነበረ? 1. አዎ 2. አይደለም

Declaration

I, undersigned, declare that this research paper was my original work, has not been presented for a degree in this or other university and that all sources of materials used for this have been acknowledged.

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Signature _____

Date of submission _____

This research paper has been submitted with my approval as university advisor:

Name of advisor	signature	date
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Name of internal examiner	signature	date
_____	_____	_____