

**ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF PUBLIC HEALTH**



**Prevalence of Depression among Adolescents and Association of
Parental Neglect on Depression in Governmental Preparatory
Schools in Addis Ababa, Ethiopia**

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Advisors-

- **Dr. Mulugeta Betre G/Mariam**
- **Dr. Nigussie Deyessa**

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**A Thesis Submitted To The School Of Public Health For The Partial
Fulfillment Of The Requirement For Master's Degree In Public Health, Addis
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❖ APPROVAL BY ADVISORS

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Acronyms and Abbreviation

- ACE.....Adverse Childhood Experience
- CDI..... Child Depression Inventory
- CES-D.....Center for Epidemiology Studies Depression Scale
- DALYs.....Disability Adjusted Life Years
- DSM-IV-TR.....Diagnostic and Statistical Manual of Mental Disorders
Fourth Edition-Text Revision
- E.C.....Ethiopian Calendar
- G.C.....Gregorian Calendar
- PHC.....Primary Health Care
- PHQ 9.....Patient Health Questionnaire
- PPS.....Population Proportion to Size
- SPSS.....Statistical Package for Social Sciences
- WHO.....World Health Organization

Abstract/Summary

Background (problem statement): Although depression is one of the major diseases that cause failure to socialize among children and adolescents, it is often neglected and not given adequate parental attention.

Objective: To assess the prevalence of depression and association of parental neglect on depression among adolescents in governmental Preparatory schools in Addis Ababa, Ethiopia 2016-2017G.C

Method: A school-based cross-sectional descriptive survey design was conducted among a total of 17,338 governmental Preparatory school students in Addis Ababa, where a sample of 700 students were randomly selected from five different schools from March to April by means of the Patient Health Questionnaire 9 and Adverse Childhood Experience Questionnaire Scale. Collected data was entered into Epi Info 7. Frequencies, crude odds ratio and logistic regressions were analyzed by Stata 14.

Result: The prevalence of depression was found to be 205(29.29%) among the 700 participants between the age group of 17-19 of which 292(41.71%) had mild, 155(22.14%) had moderate, 44(6.29%) had moderately severe depressive symptoms whereas the remaining 6(0.86%) had severe depressive symptoms. The study also showed that 372(53.13%) respondents have reported to have experienced one or more aspects of parental neglect while growing up. Among those respondents who had parental neglect, the study showed that 146(39.3%) of them were depressed. There were strong associations between depression and sex and parental neglect

Conclusion and Recommendation: Results of this study indicated there was sizeable depression prevalence among adolescents in governmental Preparatory schools and also identified those adolescents who experience parental neglect while growing up were more likely to be depressed. Schools should have a counseling service with a health professional for students and further studies with a wider population should be conducted as well

1. INTRODUCTION

1.1 Background

Prior to the 1980s, depression was thought to be very rare in children and adolescents [1] but this view has changed in recent years. Its prevalence keeps increasing sharply with age precisely during adolescence. Setting its rank in fourth as the most prevalent human disease in 1990, major depression is expected to rank second by the year 2020.[2] Being the main cause of antisocial behavior and poor social competence, a child who is depressed fails to socialize effectively which leads to social incompetence and in the long run causes social retardation. Children and adolescents who cannot socialize are inclined to low self-esteem, feelings of failure, and are often alone.[3]

Even if it causes few deaths, depression ranks fourth as a source of Disability Adjusted Life Years (DALYs), emphasizing how the review of both fatal and non-fatal health outcomes affects the disease burden ranking. With mortality indicators alone were used, mental disorders never have been ranked on the top 10 priority list of public health significance.[4] The magnitude of the burden of mental disorders in wide-ranging and depression in exacting became evident when mortality and disability effects of disease were combined into a single metric such as the DALYs.

In the most recent surveys, major depressive disorder had the highest lifetime prevalence (almost 17%) of any psychiatric disorder.[5] Among adolescents, reported rates of depression ranges from 1-6% in community samples and the rate of depression among adolescent females is double the rate of adolescent males. Estimates of cumulative prevalence of depression among older adolescents range between 14 & 25%. [6]

It is well known that parenting has a reflective impact on children's depressive symptoms and self-esteem. More specifically, parental influence and care have been found to affect children's functioning positively (i.e., high self-esteem and self-worth) and negatively (i.e., poor self-image and depressive symptoms).[7-9]

1.2 Statement of the problem

Although depression is one of the major diseases that cause failure to socialize among children and adolescents, it is often neglected and has not been given the adequate attention it needs. The absence of the service that attends to the emotional and other mental problems of children and adolescents makes it necessary for strong emphasis to be given for the support of mental health in Ethiopia for the sake of mental and behavioral welfare of growing children and adolescents.[10]

The existing poverty that prevents parents from giving optimal care to their offspring, the huge gap in the knowledge and attitude of adults regarding children and adolescent's mental and physical status and care contributes to mental distress in the children and adolescents.

In addition, there are no epidemiological studies on the prevalence of mental disorders among adolescents of high school students in Addis Ababa, Ethiopia. Above all, adolescents of the age group of 15-19 have been overlooked and studies on the prevalence and factors associated that lead to causing depression are scarce in Addis Ababa in which this study will help to be a starting point to put weight on the matter.

1.3 Rationale and Significance of the study

With very limited studies found on the prevalence of depression among adolescent high school students, this study will be used as an awakening reference for further and deeper investigation regarding the importance of child and adolescents need for careful supervision regarding mental disorders.

It will also help in acknowledging the importance of the National Mental Health Strategy (2012/13-2015/16) which focuses on different vulnerable groups among which children and adolescents are part [11]. With the slogan, "There is no health without mental health" from World Health Organization,[12] the importance of giving strong emphasis on mental health

disorders among adolescents will help people save the lives of youngsters before it gets too late and give the whole population a better understanding in the importance of the matter.

This study will, therefore, be used as an input for other researchers to undertaking expanded studies on the prevalence of depression and the effect of parental neglect on depression among secondary students, especially in Ethiopian setting as well as to be used by health professionals, for preventive programs and different stake holders that work on depression.

2. LITERATURE REVIEW

2.1 Mental Health in Children and Adolescents

“Mental health in childhood and adolescence is defined by the achievement of expected developmental cognitive, social, and emotional milestones and by secure attachments, satisfying social relationships, and effective coping skills”. Mentally healthy children and adolescents enjoy a positive quality of life; function well at home, in school, and in their communities; and are free of disabling symptoms of psychopathology.[13]

In the latter half of the 20th century, mental health services focused almost entirely on individual treatment for those with identified problems.[13] While the positive side of this individual services approach was that vital resources were directed to those in greatest need its challenge, however, that often children and adolescents were not connected with services until their problems were quite severe, which required a service that was more intensive and costly.

Despite important advances being implemented, there continues to be a gap between what is known about the many influences on children’s development and mental health and practices across the child-serving settings that impact children’s mental health and well-being.

2.2 Depression, Global Prevalence & Factors of Depression

Depression is a significant contributor to the global burden of disease and affects people in all communities across the world.[14] According to WHO, depression is predicted to be the second most prevalent disease in the year 2025. Thus, there is no question that attending to the matter is of great importance. Conceptually, among the many definitions that have been used to define depression, one of them states depression as a mood problem and have characterized it by behavior ranging from feeling dejected and hesitancy in social contacts to isolation and serious disturbance of appetite and sleep; verbal expression ranging from talks about being disappointed, excluded, blamed to talk of suicide, being killed, abandoned, helplessness; and fantasy ranging from feeling disappointed, excluded, mistreated to suicide.[15]

One out of ten people suffer from major depression and almost one out of five persons has suffered from this disorder during his (or her) lifetime (one-year prevalence is 10% and lifetime prevalence 17%).[16] By 2020, depression will be the second leading cause of world disability [17] and by 2030; it is expected to be the largest contributor to disease burden.[18]

According to Ralph depression is defined as a persistent experience of sad or irritable mood, loss of the ability to experience pleasure in nearly all activities. It is a serious health problem that can affect people of all ages, including children, adolescents and adults and both sex. In addition to this it affects an individual's every day activities by affecting an individual's emotion, cognition, behavior. It also includes a range of other symptoms such as change in appetite, disrupted sleep patterns, increased or diminished activity level, impaired attention and concentration, and markedly decreased feelings of self-worth. [19]

Prevalence of depressive symptoms is variable and alarming around the world. The prevalence of depressive symptoms among young adolescents in USA was found to be 18%. As regards to the Asian continent, Korea had a 17.4% & 20.6% of depression prevalence in girls & boys respectively and 18.4% prevalence in India. Accordingly, a study in Egypt on female adolescents showed depression prevalence of 15.3%. [20]

In the most recent surveys, major depressive disorders had the highest lifetime prevalence (almost 17%) of any psychiatric disorder.[5] Depression doesn't have a single factor rather consists of multiple influences. The most distinguished associated factors of depression are grouped in to biological factors including biological mechanisms, family and genetic influences, genetic makeup that the individuals get from their ancestors, hormonal factors (i.e. the imbalance of hormones and neurotransmitters, etc...)[21] socio-cultural factors like those of economic status, marital relationship, social relationship and educational level, psychological like low self-esteem and pessimism and cognitive factors.[22]

With this new approach, depressive disorders are properly classified as being a main concern health problem as a result of a combination of high prevalence of depression, high impact on functioning and early age of onset.

2.3 Depression and Adolescents in secondary school students

Although occurring in children of all ages, depression tends to be more prevalent as one's age increases. Behaviors like irritability, withdrawal from family and peers, and deterioration in academic performance which later leads to devastating social isolation are some of the symptoms that are displayed by children and adolescents with depression disorders.[6]

Prior to the 1980s, depression was thought to be very rare in children and adolescents[1] but this view has changed in recent years. Its prevalence keeps increasing sharply with age precisely during adolescence. Setting its rank in fourth as the most prevalent human disease in 1990, major depression is expected to rank second by the year 2020.[2]

Among studies done in China, even though there is no official estimate of the prevalence of depression in the country, there are significant rates on the subject. From studies done on adolescents in Hunan, Hong Kong, and Nanjing found that 22.9%, 50%, and 15.7% of the participants were depressed respectively.[23] These rates are high taking into account that studies were conducted in schools and are also higher than those from Western countries.[3]

Similarly in a study done on depression among adolescents, aged 13–19 Years, attending secondary schools in Trinidad, with 1290 participants and a response rate of 79.6%, the prevalence of depression was found to be $25.3\% \pm 2.37\%$. Chi-square analysis revealed statistically significant associations between depression and the categories of age, gender, living arrangements and school type. Similar findings were observed for respondents who admitted to cigarette and alcohol use or to being afraid of, or being injured by their parent ($p < 0.05$).[24]

Looking at a study conducted in Vietnam among 1159 secondary students in Can Tho-City, Vietnam during September through December, 2011, with major risk factors related to anxiety and depression being physical or emotional abuse by the family, and high educational stress, the prevalence of depression was found to be nearly 41.1% with approximately one fourth (25.9%) of the students classified as having an elevated level of depressive symptoms, while 18.7% demonstrated a level of depressive symptoms consistent with major depressive disorder. The

results also showed that female students had a significantly higher level of depressive symptoms comparable with major depressive disorder and an elevated level of depressive symptoms.[25]

Among 20 secondary schools (10th, 11th and 12th grades) in Dubai, prevalence of depressive symptoms based on the children depression inventory (CDI score > 19), revealed about 17.5% of students have elevated depressive symptoms (95% Confidence Intervals= 15.43- 19.57), and out of 27 factors affecting depressive symptoms only 9 factors showed a statistically significant predictive effect by stepwise logistic regression analysis.[20]

In a study done in Egypt in March 2013, total of 83 635 secondary school students in Menoufia Governorate during the academic year 2010–2011, a sample of 1373 students was selected and surveyed from March 2011 to April 2012 by means of the Beck Depression Inventory, a result of 28.6% of prevalence of depressive symptoms where 21.5% was for mild, 7.1% for moderate and 0% for severe depression and 11.3% of prevalence of depressive disorders was generated.[26]

Among studies done in Ethiopia a depression prevalence of 9.1% was found from the National Health Survey.[25] In Addis Ababa, prevalence of depression studies has so far been done among University students like 6kilo university and Gondar University making this study among high school adolescents relevant and necessary [27, 28]

2.4 Depression of adolescents and parental neglect

It is well-established that parenting has a profound impact on children's depressive symptoms and self-esteem. More specifically, parental influence and care have been found to affect children's functioning positively (i.e., high self-esteem and self-worth) and negatively (i.e., poor self-image and depressive symptoms).[7-9]

Parental Neglect is defined as the persistent failure of meeting a child's basic physical/psychological need which likely results in the serious impairment of the child health or development.[29] Emotional abuse which is one form of childhood trauma resulting from parental neglect is defined by World Health Organization [WHO], 1999 as: "The failure to

provide a developmentally appropriate, supportive environment, including the availability of a primary attachment figure, so that the child can develop a stable and full range of emotional and social competencies commensurate with her or his personal potentials and in the context of the society in which the child dwells.[30] According to the a Meta-Analysis of Worldwide Prevalence on the Universality of Childhood Emotional Abuse, a combined prevalence of emotional abuse for the total set of 29 publications that were reviewed was 26.7%.[31] The relationship among parenting styles, depression and life satisfaction revealed that adolescents who received neglectful parenting obtained lower scores on both self-esteem and life satisfaction and got higher depression scores than children.[32] Other studies found that neglectful parenting led to dissatisfaction, depression, and sadness among children as well. [33]

2.5 Depression assessment, measurement and screening among adolescent secondary school students

Even if the diagnostic criteria for mood disorders in the DSM-IV-TR are almost identical across all age groups, the expression of disturbed moods varies in children according to their age. Young and depressed children commonly show symptoms that appear less often as they grow older, including mood-congruent auditory hallucinations, somatic complaints, withdrawn and sad appearance, and poor self-esteem. Symptoms which are more common among depressed youngsters in late adolescence than in young childhood are pervasive anhedonia, severe psychomotor retardation, delusions and a sense of hopelessness. Symptoms that appear with the same frequency, regardless of age and developmental status, include suicidal ideation, depressed or irritable mood, insomnia and diminished ability to concentrate.[6]

Adolescent depression has received a huge interest in clinical and developmental psychology in the last 3 decades; The Diagnostic and Statistical Manual of Mental Disorders fourth edition, (DSMIV) revised criteria is currently used to diagnose depression in adolescents. [6]According to this manual there are around nine criteria that can be used to diagnose the problem in depression.

These are: *“Depressed mood, loss of interest, weight gain or lose, sleep problem, energy lose, feeling of worthlessness, suicidal ideation are the main criteria of depression”*[34]

Screening adolescents for depression risk using brief questionnaires of depressive symptoms is one method for preliminary identification of adolescents who may be depressed. Some of them include PHQ 9 which is a multipurpose instrument for screening, diagnosing, monitoring and measuring the severity of depression. PHQ 9 score of ≥ 10 has sensitivity and a specificity of 88% for major depression. Other screening tools are also available like that of Beck Depression Inventory(BDI), Child Depression Inventory(CDI) Geriatric Depression Scale (GDS) and Adverse Childhood Experience Questionnaire (ACE) which is a self-report instrument covering 10 items, to rate the severity of emotional abuse and neglect, physical abuse and neglect and sexual abuse. [35] Such screening has been used in primary health care (PHC) settings and in schools.[20] If not looked at seriously, depression disorders can lead to adverse outcome affecting the youngsters present and future, their families, as well as their communities.

In summary, one out of ten people suffer from major depression and almost one out of five persons has suffered from it during his (or her) lifetime. Setting its rank in fourth as the most prevalent human disease in 1990, by 2020, depression is said to be the second leading cause of world disability and by 2030; it is expected to be the largest contributor to disease burden. Regardless of important advances being implemented, there continues to be a gap between what is known about the many influences on children's development and mental health and practices across the child-serving settings that impact children's mental health and well-being. Depression tends to be more prevalent as ones age increases even though it occurs in children of all ages. Its prevalence keeps increasing sharply with age precisely during adolescence. In contrast, the relationship among parenting styles, depression and life satisfaction reveals that adolescents who received neglectful parenting obtained lower scores on both self-esteem and life satisfaction and got higher depression scores than children. With screening tools like Patient health questionnaire (PHQ 9), Beck Depression Inventory (BDI), Child Depression Inventory (CDI) Geriatric Depression Scale (GDS) and Adverse Childhood Experience Questionnaire (ACE) screening adolescents for depression risk using brief questionnaires of depressive symptoms is one method for preliminary identification of adolescents who may be depressed.

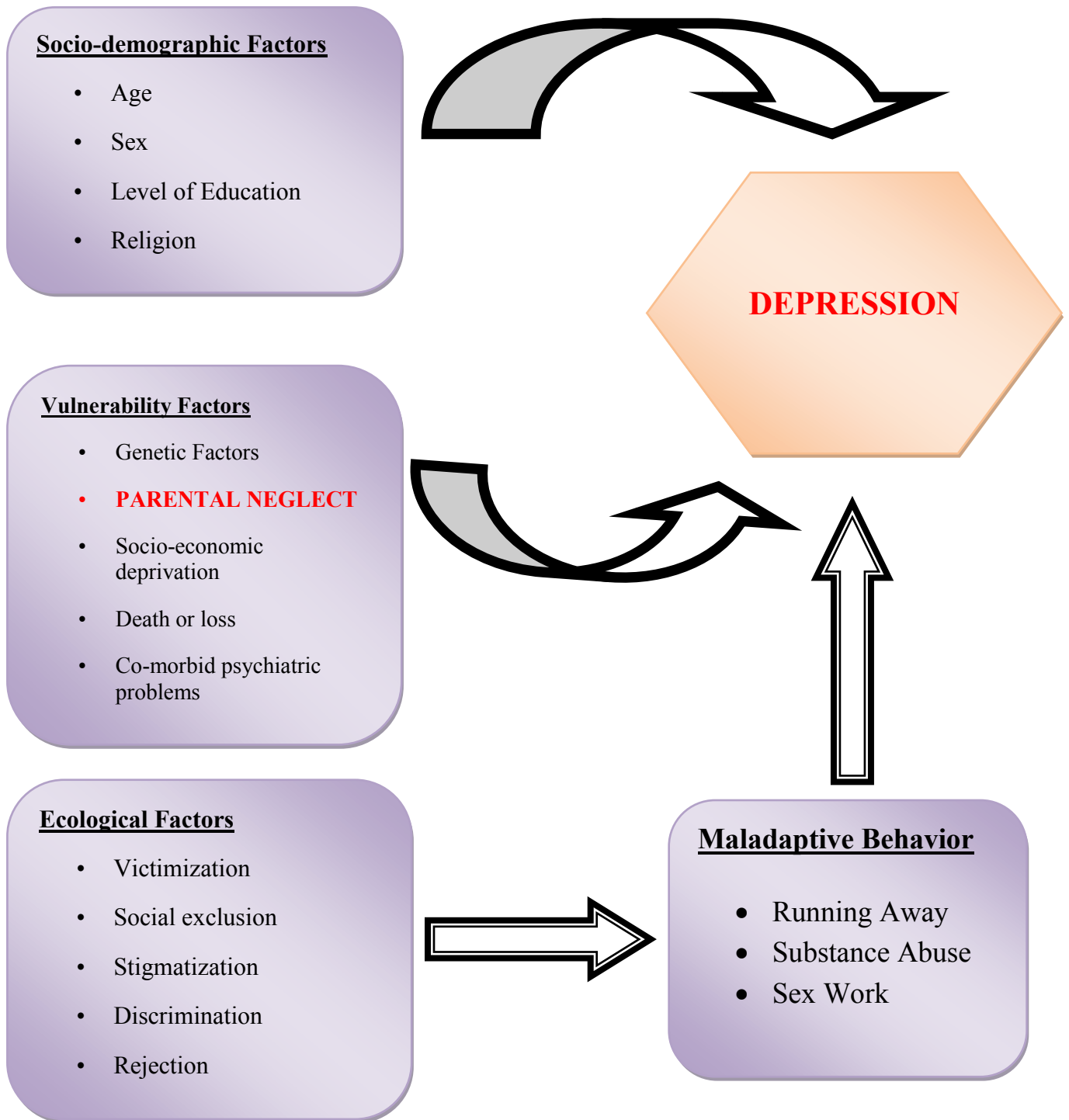


Figure 1: Conceptual Framework adopted and modified from the stress diathesis model for depression

- The conceptual framework was adopted and modified from the stress diathesis model for depression [36]. It includes socio-demographic factors, vulnerability factors where one of the factors is Parental Neglect which will be assessed for its association with depression. The other factors are the ecological factors and the maladaptive behavior. Each factor has been associated with depression in one way or another in different studies.

3. RESEARCH QUESTION

1. What is the prevalence of depression among adolescents?
2. Is there parental neglect among adolescents?
3. Does parental neglect have an association with on adolescents' depression?

4. OBJECTIVES

4.1. General Objective

- To assess the prevalence of depression and association of parental neglect on depression among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia 2016-2017G.C

4.2. Specific Objective

- To measure the prevalence of depression among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia 2016-2017G.C
- To describe parental neglect towards adolescents with depression among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia 2016-2017G.C
- To determine the association of parental neglect on depression among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia 2016-2017G.C

5. METHODOLOGY

5.1. Study Area

The study was conducted in Addis Ababa, the capital city of Ethiopia from March 2017-April 2017. Addis Ababa has 10 sub-cities which have a total of 212 secondary schools comprising public, private, governmental, organization, religious and missionary ownership. Among the governmental schools, 10 of the schools have an education level up to secondary education class with approximately 17,338 students all together by the year 2008 E.C The specific study area were 5 randomly chosen governmental Preparatory schools from 5 sub cities namely Addis Ketema secondary school from Addis Ketema sub city, Derartu Secondary School from Akaki Kality Sub city, Bole Secondary School from Bole sub city, Higher 23 from Nifas Silk sub city and Wonderad Secondary from Yeka sub city [37].

5.2. Study Design

A school-based cross- sectional descriptive survey design that employed a quantitative method.

5.3. Source Population

All secondary school students found in Addis Ababa, Ethiopia

5.4. Study Population

All secondary school students found in governmental Preparatory schools in Addis Ababa, Ethiopia

5.5. Inclusion Criteria

- Students who are mentally and physically capable of being completing the self administered questionnaire
- Students who are willing to participate in the study
- Students between the age 15-19 years

5.6. Sample Size

Using a single population proportion formula

$$n_0 = \frac{Z^2 \cdot p \cdot (1-p)}{d^2}$$

- **For the prevalence of depression:-**

Where,

n= the desired sample size

p= the prevalence of depression among adolescents= 26.4% [38]

Z= the standard normal score set at 1.961 (95% confidence interval)

d= the margin of error to be tolerated (4%)

Therefore:-

$$n = \frac{(Z\alpha/2)^2 \cdot p \cdot (1-p)}{d^2} = \frac{(1.96)^2 \cdot X \cdot (0.264 \times 0.736)}{(0.04)^2} = 466.25 \sim \underline{\underline{466}}$$

- 466 * 1.5 (design effect)= 699

With the addition of 10% non-response rate the final sample size will be **769.9~770**

- **For the prevalence of parental neglect:-**

Where,

n= the desired sample size

p= the prevalence of depression among adolescents= 21.9% [39]

Z= the standard normal score set at 1.961 (95% confidence interval)

d= the margin of error to be tolerated (4%)

Therefore:-

$$n = \frac{(Z\alpha/2)^2 \cdot p \cdot (1-p)}{d^2} = \frac{(1.96)^2 \cdot X \cdot (0.219 \times 0.781)}{(0.04)^2} = 410.4 \sim \underline{\underline{410}}$$

- 410 * 1.5 (design effect)= 615

With the addition of 10% non-response rate the final sample size will be ~~676.5~~677

Therefore, based on the larger estimate for prevalence for depression 770 samples were selected from the 5 schools.

5.7. Sampling Procedure

The city of Addis Ababa administration system is divided into 10 Sub-cities. From the total number of schools among the 10 sub-cities, the governmental schools were first filtered out from the private and public. Only secondary schools were chosen from the total government schools. Among the total 67 secondary schools, only 10 of them comprised of Preparatory schools (11-12th grade). Among the 10 schools, 5 schools were randomly selected namely Addis Ketema secondary school with 51 sections and a total of 2877 students, Wonderad secondary school with 36 sections and a total of 2160 students, Derartu secondary school with 28 sections and a total of 1086 students, Bole secondary school with 51 sections and total a of 2110 students and Kefetegna 23 secondary school with 32 sections and a total of 1670 students. After that, by population proportion to size, the total sample size was divided among each school. Finally, by simple random sampling selected students/respondents were chosen for the study. (Figure 2)

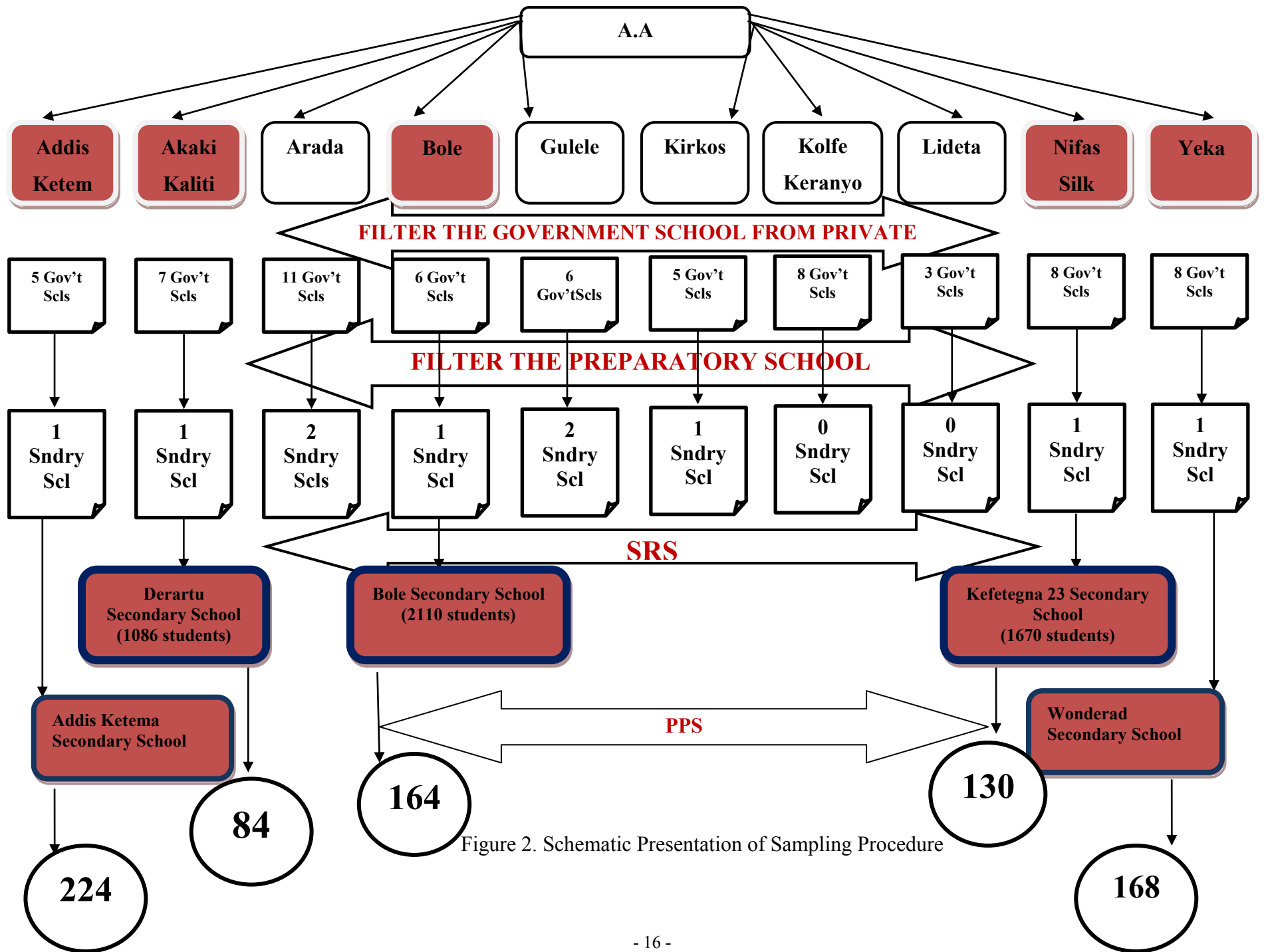


Figure 2. Schematic Presentation of Sampling Procedure

5.8. Data Collection Procedure

A self administered pretested questionnaire, consisting of close ended questions was prepared in English then translated into Amharic for feasibility and better understanding for the respondents. The questionnaire contained three parts with a total of 27 questions; sociodemographic questions, Patient Health Questionnaire 9 (PHQ 9) for assessing depression and the Adverse Childhood Experience Questionnaire (ACE) for assessing parental neglect. Since it was a self administered questionnaire, there were no data collectors for this study. Two days prior to the data collection period, supervisors were trained. The supervisors were given orientation and pointers on what to do, what to check for when the questionnaire is returned after filing, and on how to help respondents throughout the filling out of the questionnaire regarding any confusion. There were 10 supervisors who were present to overlook the data collection process. The overall data collection process was coordinated and supervised by the supervisors. The filled questionnaires were checked daily by the supervisors for completeness and consistency of responses.

5.9. Data Quality Control and Management

For this study, a standardized questionnaire was used and pretesting was carried out on 10% of the sample population prior to data collection at Abyot Kirs secondary school in Kirkos sub city. A few corrections regarding the questionnaire which were not clear, easy to comprehend and needed modifying were be changed and altered accordingly.

After the data was collected, it was checked for inconsistency, legibility issues and omission. Data that had logical and conceptual inconsistency were edited and corrected during data collection by supervisors. Data which were incomplete more than 10% were excluded. The collected data was entered into Epi Info 7 for cross checking and reentered to secure the quality of data. Data cleaning was done using Microsoft Excel 2010 to check for missing values and errors. Finally, data that was fully complete was coded and stored for analysis on Stata 14.0.

5.10. Variables

Dependant Variables

- Depression

Independent Variable

- Socio-demographic (Age, Sex, Educational Status, Religion, Occupation)
- Vulnerability Factors (Parental Neglect, Death or Loss, Socio-economic deprivation, Co-morbid psychiatric problems)
- Ecological Factors (Victimization, Stigmatization, Social Exclusion, Discrimination, Rejection)

5.11. Operational and standard definition

Depression- A mental disorder marked by persistent sadness, discouragement, loss of self-worth and loss of interest in usual activities and with PHQ 9 score of 5, 10, 15 & 20 representing mild, moderate, moderately severe and severe depression respectively. [40]

Adolescents- For this study, a school attending person specifically within the 15-19 yrs of age

Secondary School- School year's 11th and 12th grade

Adolescents in Secondary School- Students attending governmental Preparatory schools which are between the ages of 15-19yrs

Parental Neglect- The persistent failure of meeting a child's basic physical/psychological need which likely results in the serious impairment of the child health or development. [30]

5.12. Data Analysis Procedures

After data collection, each questionnaire was checked visually for completeness. Coding was done for each questionnaire and for variables in the questionnaire. After this, data was entered using Epi Info 7 and was exported to Microsoft Excel for cleaning and to Stata version 14 for analysis. Summary statistics were used to describe the study population in relation to relevant variables and outlines.

Frequencies and measures of variation described the study population in relation to socio-demographic and other relevant variables. Crude odds ratio was calculated with 95% confidence interval and P- value. Binary logistic regression and multiple logistic regressions were used to measure the association between dependent and independent variables.

5.13. Ethical Consideration

After the approval of the proposal by the advisors of the School of Public health and after having official letter from the Addis Ababa University, administrative permission for data collection was obtained from respective school administrative bodies. Written consent was obtained from the respondents/students after explaining the purpose of the study with the benefits and risks. In addition withdrawal from the study during the interview was guaranteed to all the study participants at any time and confidentiality was ascertained by explaining that no data would be disclosed as an individual respondents basis, rather, information will be displayed and disseminated at a community level in general.

5.14. Dissemination of Result

The result will be submitted and presented for the Addis Ababa University College of Health Sciences/School of Public Health as a partial fulfillment for Master's Degree in Reproductive Health. The result will also be disseminated for the selected sub-cities and high schools.

6. RESULT

The result and interpretation of the analyzed data are presented in sample description in terms of their demographic data which are provided by frequency and percentage. The description of the study is also examined along with the research questions.

6.1 Description of the Socio- demographic and Adverse Childhood Experience

Characteristics of Respondents

Among the total number of 770 distributed questionnaires, 700 were filled completely and consistently with a response rate of 91.02%. The remaining 70 questionnaires were not included in the study as a result of non-response rates collected from all the sample schools. The mean age of the participants was 18.07 with a standard deviation of 0.71. The minimum and maximum ages of respondents were 17 and 19 respectively among which 446 were females and the rest were males. From the total number of students, 256 (36.6%) of them were in 11th grade whereas the remaining 444 (63.4%) were 12th graders.

Among the respondents 510 (72.9%) of them were followers of Orthodox religion whereas the remaining 190 (27.1%) of them were followers of other religions. Occupation of respondents' father was classified into four categories where 31 (4.4%) were farmers, 118(16.9%) were merchants, 221 (31.6%) were government employees, and 330 (47.1%) private employees. Likewise, respondents' mother occupation was under the same category with an additional category namely being a housewife which accounted for 70 mothers out of the total number of mothers.

Five classifications were used to categorize respondents' father and mother educational levels. Accordingly, 241(34.4%) of the response for fathers' educational level were under the certificate & above category while the number of mothers' educational level for the same category was 159 (22.7%) (Table 1.)

Table 1. Socio- Demographic Characteristics of adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia, 2009 (n=700)

Variables	Frequency (n)	Percent (%)	
Age	17yrs	156	22.3
	18yrs	335	47.9
	19yrs	209	29.9
Sex	Male	242	35.2
	Female	446	64.8
Grade	11 th Grade	256	36.6
	12 th Grade	444	63.4
Religion	Orthodox Christian	510	72.9
	Muslim	95	13.6
	Protestant	74	10.6
	Catholic	21	3.0
Fathers Occupation	Farmer	31	4.4
	Merchant	118	16.9
	Government Employee	221	31.6
	Private Employee	330	47.1
Mothers Occupation	Farmer	18	2.6
	Merchant	102	14.6
	Government Employee	151	21.6
	Private Employee	359	51.3
	Housewife	70	10.0
Fathers Educational Status	Illiterate	36	5.1
	1-4 th Grade	45	6.4
	5-8 th Grade	136	19.4
	9-12 th Grade	242	34.6
	Certificate & Above	241	34.4
Mothers Educational Status	Illiterate	60	8.6
	1-4 th Grade	81	11.6
	5-8 th Grade	190	27.1
	9-12 th Grade	210	30.0
	Certificate & Above	159	22.7

The adverse childhood experience questionnaire tool was used to assess parental neglect among adolescents having 3 hallmarks mainly known as abuse which asks about physical, emotional and sexual questions where the neglect part assesses about physical and emotional neglect and the household dysfunction section involves the questions about divorce, mother treat violently, substance abuse, mental illness, and incarcerated relative.

Among the 700 adolescents who participated in this study, 372 of the participants answered yes to one or more questions among the total 10 questions (Table 2.)

Table 2. Prevalence of Adverse Childhood Experience among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia, 2009 (n=700)

Variables		Male (n, %)	Female (n, %)	Total (n, %)
Physically Hurt	Yes	42 (36.5)	73 (63.5)	115(16.4)
	No	200 (34.9)	373 (65.1)	585 (83.6)
Marks of Injury	Yes	44 (37.0)	75 (63.0)	122 (17.4)
	No	198 (34.8)	371 (65.2)	578 (82.6)
Sexual Abuse	Yes	16 (40.0)	24 (60.0)	40 (5.7)
	No	226 (34.9)	422 (65.1)	660 (94.3)
No Love	Yes	44 (34.1)	85 (65.9)	129 (18.4)
	No	198 (35.4)	361 (64.6)	571 (81.6)
Not Enough Food or Protection	Yes	16 (45.7)	19 (54.3)	35 (5.0)
	No	226 (34.6)	427 (65.4)	665 (95.0)
Divorced Parents	Yes	47 (31.5)	102 (68.5)	150 (21.4)
	No	195 (36.1)	344 (63.8)	550 (78.6)
Abuse with Gun or Knife	Yes	14 (30.4)	32 (69.6)	46 (6.6)
	No	228 (35.5)	414 (64.5)	654 (93.4)
Live With Alcoholic or Drug User	Yes	27 (40.9)	39 (59.1)	67 (9.6)
	No	215 (34.6)	407 (65.4)	633 (90.4)
Depressed or Attempted Suicide HH Member	Yes	22 (36.7)	38 (63.3)	61 (8.7)

	No	220 (35.0)	408 (65.0)	639 (91.3)
HH Member in Prison	Yes	54 (45.8)	64 (54.2)	119 (17.0)
	No	188 (33.0)	382 (67.0)	581 (83.0)
ACE Score	Yes	139 (37.9)	228 (62.1)	372 (53.1)
	No	103 (32.1)	218 (67.9)	328 (46.9)

6.2 Prevalence of Depression

Using the PHQ-9 this study was able to assess the prevalence of depression among the participants. Out of 700 high school adolescents from the sampled governmental schools who participated in this study, the overall prevalence of depression was 29.29%. Among those students with depression, those who scored between 0-4 were categorized as not depressed, those who scored between 5-9 were 41.71% and categorized as having mild depressive symptoms. In the same manner, those who scored between 10-14 and 15-19 were categorized as respondents who have moderate and moderately severe depressive symptoms with 22.14% and 6.29% proportion respectively. The remaining respondents who had a 0.86% result were categorized as having severe depressive symptoms scoring 20 and in the PHQ-9 depression assessment tool. (Fig. 1)

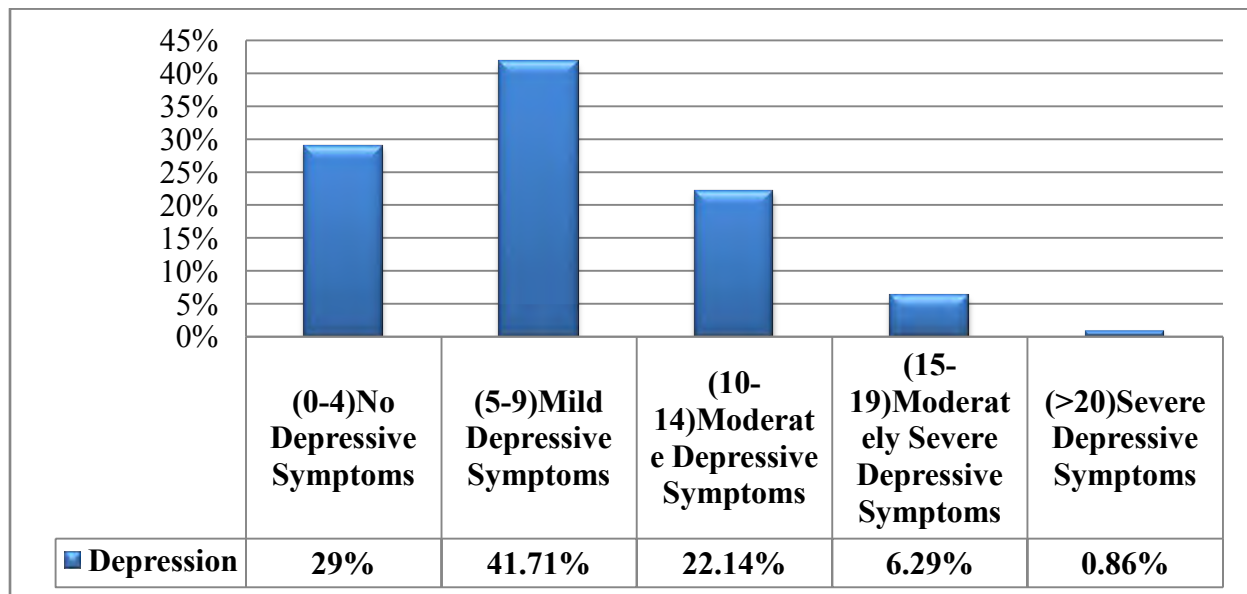


Figure 3. Prevalence of Depression and its Severity among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia, 2009 (n=700)

6.3 Bivariate Analysis

- **Socio- demographic Variables**

Logistic regression was used to determine the independent variables for which depression had greater odds of being present.

From the variables included in the sociodemographic part, sex of the respondents had a statistically significant association at value of <0.004 with 95% CI. The odds of females having depression is 1.6 times higher when compared with the odds of male [COR: 1.6(1.18, 2.43)]. Respondents mothers occupation was also found to be significant with a value <0.01 . Respondents whose mother was a farmer and merchant had a 3.6 and 1.4 times higher odds of getting depressed [COR: 3.6(1.2-10.5); 1.6(0.7-2.8)]. Educational status of the respondents mother had a statistically significant association with a value <0.012 . The odds of respondents who had illiterate mothers getting depressed were 2.3 times higher than those who were literate [COR: 2.3(1.2-4.3)] (Table 3.)

Table 3. Bivariate analysis of sociodemographic factors with depression among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia, 2009 (n=700)

Characteristics	Depression		COR(95%CI)
	Yes (n, %)	No (n, %)	
Age**			
17yrs	40(25.6)	116(74.4)	1.0
18yrs	93(27.8)	242(72.2)	1.1[0.7-1.7]
19yrs	72(34.4)	137(65.6)	1.5[0.9-2.4]
Sex(*)**			
Male	54(22.3)	188(77.7)	1.0
Female	146(32.7)	300(67.3)	1.6[1.1-2.4]
Grade			
11 th Grade	76(29.7)	180(70.3)	1.0[0.7-1.4]
12 th Grade	129(29.1)	315(70.9)	1.0

Religion**

Orthodox Christian	162(31.8)	348(68.2)	1.0
Muslim	20(21.1)	75(78.9)	0.5[0.3-0.9]
Protestant	12(16.2)	62(83.9)	0.4[0.2-0.7]
Catholic	11(52.4)	10(47.6)	2.3[0.9-5.6]

Fathers Occupation

Farmer	12(38.7)	19(61.3)	1.5[0.7-3.3]
Merchant	34(28.8)	84(71.2)	1.0[0.6-1.6]
Government Employee	65(29.4)	156(70.6)	1.0[0.7-1.5]
Private Employee	94(28.5)	236(71.5)	1.0

Mothers Occupation(*)**

Farmer	10(55.6)	8(44.4)	3.6[1.2-10.5]
Merchant	34(33.3)	68(66.7)	1.4[0.7-2.8]
Government Employee	48(31.8)	103(68.2)	1.3[0.7-2.5]
Private Employee	95(26.5)	264(73.5)	1.03[0.5-1.8]
Housewife	18(25.7)	52(74.3)	1.0

Fathers Educational Status

Illiterate	11(30.6)	25(69.4)	1.0[0.4-2.1]
1-4 th Grade	17(37.8)	28(62.2)	1.3[0.7-2.7]
5-8 th Grade	41(30.1)	95(69.9)	0.9[0.6-1.5]
9-12 th Grade	63(26.03)	179(73.9)	0.8[0.5-1.2]
Certificate & Above	73(30.3)	168(69.7)	1.0

Mothers Educational Status(*)**

Illiterate	29(48.3)	31(51.7)	2.3[1.2-4.3]
1-4th Grade	27(33.3)	54(66.7)	1.2[0.7-2.2]
5-8th Grade	50(26.3)	140(73.7)	0.9[0.5-1.4]
9-12th Grade	54(25.7)	156(74.3)	0.8[0.5-1.3]
Certificate & Above	45(28.3)	114(71.7)	1.0

*=**P<0.05****=**P<0.25 Cut off point for multivariate analysis**

- **Adverse Childhood Experience Variables**

The adverse childhood experience which is used to assess parental neglect by seeing abuse, neglect and household dysfunction in each respondents answer, was found to have a statistically significant association with depression at value of <0.0001 with 95% CI. The odds of having depression in respondents who have parental neglect were found to be 2.9 times higher when compared with the odds of not being neglected. [COR: 2.9(2.0, 4.1)] (Table 4.)

Table 4. Bivariate analysis of adverse childhood experience with depression among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia, 2009 (n=700)

Characteristics	Depression		COR(95%CI)	P value
	Yes (n, %)	No (n, %)		
Physically Hurt				
Yes	59(51.30)	56(48.70)	3.1[2.1-4.7]	
No	146(24.96)	439(75.04)	1.0	
Marks of Injury				
Yes	62(50.82)	60(49.18)	3.1[2.1-4.6]	
No	143(24.74)	435(75.26)	1.0	
Sexual Abuse				
Yes	22(55.00)	18(45.00)	3.1[1.6-6.0]	
No	183(27.73)	477(72.27)	1.0	
No Love				
Yes	68(52.71)	61(47.29)	3.5[2.3-5.2]	
No	137(23.99)	434(76.01)	1.0	
Not Enough Food or Protection				
Yes	22(62.86)	13(37.14)	4.4[2.1-9.0]	
No	183(27.52)	482(72.28)	1.0	
Divorced Parents				
Yes	65(43.33)	85(56.67)	2.2[1.5-3.2]	

	No	140(25.45)	410(74.55)	1.0	
Abuse with Gun or Knife					
	Yes	24(52.17)	22(47.83)	2.8[1.5-5.2]	
	No	181(27.68)	473(72.32)	1.0	
Live with Alcoholic or Drug User					
	Yes	26(38.81)	41(61.19)	1.6[0.9-2.7]	
	No	179(28.28)	454(71.72)	1.0	
Depressed or Attempted Suicide HH Member					
	Yes	21(34.43)	40(65.57)	1.2[0.7-2.2]	
	No	184(28.79)	455(71.21)	1.0	
HH Member in Prison					
	Yes	37(31.09)	82(68.91)	1.1[0.7-1.7]	
	No	168(28.92)	413(71.08)	1.0	
ACE Score					
	Yes	146(39.3)	226(60.7)	2.9[2.0-4.1]	
	No	59(17.9)	269(82.1)	1.0	0.0001*(**)

6.4 Multivariate Analysis

Variables with p value cut of point of <0.25 were added to be analyzed in multivariate regression. From sociodemographic variables sex, was significantly associated with values <0.004 with 95%CI [AOR: 2.0(1.3-3.0)]. Respondents' mother occupation was also significantly associated with value <0.01 where mother being a farmer and merchant had a 2.6 and 1.2 times higher odds of getting depressed [AOR: 2.3(1.1-4.6); 1.2(0.6-2.4)].

Another sociodemographic variable that had a significant association was respondents' mother educational level with a value of <0.012 where illiterate mothers had a 2.3 times higher odds of getting depressed [AOR: 2.3 (1.1-4.6)]

On the other hand variables like age and religion had a value of 0.057 and 0.1 [AOR: 1.6(0.9-2.7); 2.5(0.9-6.5)] respectively but weren't significantly associated with depression.

Respondents who had parental neglect while growing up had a significant association with 3.1 times higher odds of getting depressed than those who didn't have parental neglect [AOR: 3.1 (2.1-4.6)] (Table 5)

Table 5. Multivariate analysis for factors associated with depression among adolescents in the sampled governmental Preparatory schools in Addis Ababa, Ethiopia, 2009 (n=700)

Characteristics	Depression		COR(95%CI)	AOR(95%CI)
	Yes (n, %)	No (n, %)		
Age				
17yrs	40(25.6)	116(74.4)	1.0	1.0
18yrs	93(27.8)	242(72.2)	1.1[0.7-1.7]	0.9[0.6-1.5]
19yrs	72(34.5)	137(65.5)	1.5[0.9-2.4]	1.6[0.9-2.7]
Sex				
Male	54(22.3)	188(77.7)	1.0	1.0
Female	146(32.7)	300(67.3)	1.6[1.1-2.4]	2.0[1.3-3.0]*
Grade				
11 th Grade	76(29.7)	180(70.3)	1.0[0.7-1.4]	
12 th Grade	129(29.05)	315(71.0)	1.0	
Religion				
Orthodox Christian	162(31.8)	348(68.2)	1.0	1.0
Muslim	20(21.05)	75(79.0)	0.5[0.3-0.9]	0.6[0.2-1.0]
Protestant	12(16.2)	62(83.8)	0.4[0.2-0.7]	0.4[0.2-0.9]
Catholic	11(52.4)	10(47.6)	2.3[0.9-5.6]	2.5[0.9-6.5]
Fathers Occupation				
Farmer	12(38.7)	19(61.3)	1.5[0.7-3.3]	
Merchant	34(28.8)	84(71.2)	1.0[0.6-1.6]	
Government Employee	65(29.4)	156(70.6)	1.0[0.7-1.5]	
Private Employee	94(28.5)	236(71.5)	1.0	
Mothers Occupation				
Farmer	10(55.6)	8(44.4)	3.6[1.2-10.5]	2.3[1.1-4.6]

Merchant	34(33.3)	68(66.7)	1.4[0.7-2.8]	1.2[0.6-2.4]
Government Employee	48(31.8)	103(68.2)	1.3[0.7-2.5]	0.9[0.5-1.6]
Private Employee	95(26.5)	264(73.5)	1.03[0.5-1.8]	0.9[0.5-1.6]
Housewife	18(25.7)	52(74.3)	1.0	1.0
Fathers Educational Status				
Illiterate	11(30.6)	25(69.4)	1.0[0.4-2.1]	
1-4 th Grade	17(37.8)	28(62.2)	1.3[0.7-2.7]	
5-8 th Grade	41(30.1)	95(69.9)	0.9[0.6-1.5]	
9-12 th Grade	63(26.03)	179(73.0)	0.8[0.5-1.2]	
Certificate & Above	73(30.3)	168(69.7)	1.0	
Mothers Educational Status				
Illiterate	29(48.3)	31(51.7)	2.3[1.2-4.3]	2.3[1.1-4.6]
1-4th Grade	27(33.3)	54(66.7)	1.2[0.7-2.2]	1.2[0.6-2.4]
5-8th Grade	50(26.3)	140(73.7)	0.9[0.5-1.4]	0.9[0.5-1.6]
9-12th Grade	54(25.7)	156(74.3)	0.8[0.5-1.3]	0.9[0.5-1.6]
Certificate & Above	45(28.3)	114(71.7)	1.0	1.0
ACE Score				
Yes	146(39.3)	226(60.7)	2.9[2.0-4.1]	3.1[2.1-4.6]*
No	59(17.9)	269(82.1)	1.0	1.0

7. DISCUSSION

Overall, the results from this study are well in line with those of previous studies. With the objective of assessing the prevalence of depression and association of parental neglect on depression among adolescents, this paper has tried to answer the question of the prevalence of depression among adolescents, the presence of parental neglect among adolescents and the association between the two.

While implementing a cross-sectional descriptive survey design of 700 samples between the age group of 17-19, the prevalence of depression was found to be 29.29 %. The odds of getting depressed were 1.6 times higher in females as compared to males. This result was found to be consistent with another study like the study done in Trinidad, with 1290 participants and a response rate of 79.6% which had a prevalence of depression of $25.3\% \pm 2.37\%$ where logistic regression indicated that females were 1.7 times as likely to be depressed when compared with males [24].

The study done in Egypt at a secondary school students in Menoufia Governorate during the academic year 2010–2011 had a result of 28.6% of prevalence of depressive symptoms where 21.5% was for mild, 7.1% for moderate and 0% for severe depression where similar findings were found during this study at which 22.14% and 6.29% had mild and moderately severe depressive symptoms respectively whereas the remaining 0.86% had severe depressive symptoms. [26].

Regarding education, mothers' education level was associated with the presence of depression. It was found that the higher the level of parents' education, the lower the elevated depressive symptoms. Depression was more prevalent among students whose mothers are illiterate (48.3%) in comparison with 28.3% of educated parents.

Education is important in raising adolescents especially in regard to psychological aspects. This result coincides with other studies like the study done in Dubai involving students of the 10th, 11th and 12th grades which proved the correlation of parent's education with adolescent

depressive symptoms where depressive symptoms are more prevalent among students whose fathers are illiterate (37.5%) in comparison with 13.6% of educated parents [20].

Another association among respondents' parents was the occupation of mother. The study showed that respondents whose mother had occupations like farmer and merchant were 3.6 and 1.6 times more likely to be depressed while mothers of respondents with occupation like government employee and private employee had a decreased likelihood of being depressed in comparison.

Although this study showed a 29.29% prevalence of depression among adolescents attending governmental Preparatory school, other studies have shown a much different result. As a result, a study done in Dubai had much lower prevalence rate which was 17.5%. This result could be due to different reasons one of which could be the difference in the screening tools used. While this study used the PHQ 9 to assess prevalence of depression, the study in Dubai has used the CDI scoring [20].

On another opposite side, a study done in Vietnam on depression, anxiety, and suicidal ideation among Vietnamese secondary school students which measured depression using the Center for Epidemiology Studies Depression Scale (CES-D), the prevalence of depression was an estimate of 41.1%. Female students reported higher levels of depression along with factors like physical and emotional abuse within the household which is similar to this study but the higher prevalence of depression could in this case also be due to different screening tools [25].

Similarly to the above studies, a study from Northern Iran on the prevalence of depression among high school and pre-university adolescents using Beck's questionnaire had found 34% of their subjects to be depressed with mild depression in 28%, moderate in 5.7%, and severe in 0.3% of students in the study [41].

The presence of parental neglect among adolescents was found to be 53.1% in a sample of 700 participants. A positive association was found between depression and parental neglect where 39.3% of the respondents were more prone to depression as compared to the participants who

didn't have parental neglect while growing up which means that adolescents who had parental neglect while growing up were 2.9 times more likely to have the odds of getting depressed as compared to those who didn't.

According to a meta-analysis conducted in 2012 at Netherlands, a similar finding was reported where the self-reported prevalence of childhood emotional abuse was estimated at 36.3% or 363 per 1,000 children, whereas the prevalence based on informant studies was 0.3%, or 3 per 1,000 children which also pointed out the fact that since there was no gender differences and a worldwide meta analysis which was conducted across continents, childhood abuse is a universal phenomenon [32].

The differences and disagreement between the many studies that were studied throughout the years in different parts of the world may be attributed to the use of different tools for measurement of depression, different sample size, motivation of the student to respond, and the individual's lifestyle as whole.

Although there are a few studies done around the world that found similar results to this study, there are also others which are either by far higher or very lower in comparison. These differences could have been due to various reasons among which different screening tools and sample size variations among studies could be mentioned.

Strength of the study

The strength of the study was that it used standardized tools like PHQ-9 which is used to screen (identify) major symptoms of depression and ACE which is used to assess parental neglect and abuse.

Limitation of the study

The tool used for screening limits the depressive measurement as it is required to have a strict clinical diagnosis related to many factors as family and personal history in order to determine accurately diagnosis of depression.

In addition, the problem of not including other variables like negative life events, academic factors, personal factors and environmental factors can also be listed as drawback of this study.

8. CONCLUSION

The prevalence of depression in adolescents in the sampled governmental Preparatory schools in Addis Ababa was found to be 29.29% among which 41.7% of them had mild depressive symptoms where 22.14% and 6.29% had moderate and moderately severe depressive symptoms respectively. The remaining 0.86% had severe depressive symptoms. Depression among governmental Preparatory school adolescents was found to be associated with sex, respondents' occupational status, respondents' educational status and also the presence of parental neglect. The presence of parental neglect among the participants was 53.13% from the total 700 samples. This study has shown that depression has positive association with parental neglect which was assessed by using the adverse childhood experience questionnaire tool where 39.3% of the respondents were reported to have depression also had parental neglect

9. RECOMMENDATION

Although the PHQ9 and ACE questionnaire tools are validated tools used to assess depression and parental neglect respectively, they don't necessarily give a definitive diagnosis but instead more of guidance to the subject. As the results of the study have shown, the presence of depression in the sampled governmental Preparatory school adolescents is nearly 30% and the association between depression and parental neglect was 39.3%.

First of all, a wider study that includes all the schools both in Addis Ababa and also Ethiopia is recommended to get the general prevalence among secondary school adolescents. Secondly, since confidentiality was assured to the respondents during the data collection, there was no means of knowing which respondents were depressed. In order to know and help the respondents/students for the future as well as to minimize the number of students who are depressed schools should consider having a health professional at school grounds in all times where free and open discussions and guidance should be held.

Last but not least, this study recommends the ministry of health to focus on interventions of both reducing and improving the prevalence of depression by disseminating information to the public and allocating funding for the provision of mental health services and treatment, creating awareness about the subject to the community and integrating mental health services in to primary health care.

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ANNEX I-INFORMATION SHEET

Study Title- Assessment of prevalence of depression and parental neglect among adolescents in selected governmental Preparatory schools in Addis Ababa, Ethiopia

Lead Investigator- Senait Seid

Contact Phone- 0911170066

Dear respondents (he/she)

This Participant Information Sheet will help you decide if you'd like to take part. We will go through the necessary information you would like to know about with you and answer any questions you may have. Before you decide to take part in this study, feel free to talk about the study with other people if you want.

This is a study on assessing the prevalence of depression and effect of parental neglect among adolescents in Governmental Preparatory schools in Addis Abeba Ethiopia. The purpose of this study is to assess the prevalence and associated factors of depression and the effect it has on adolescents. The respondents of this study will be asked to fill out a set of questions that will take 20-30 minutes max. This study will help to understand and focus more on the needs of adolescents and the close monitoring and care they need.

Whether or not you take part is your choice. If you don't want to take part, you don't have to give a reason, and it won't affect you in any way. If you do want to take part now, but change your mind later, you can pull out of the study at any time. In the event of withdrawal from the study, all associated data collected will be immediately destroyed. Names or identity will be omitted for the privacy and confidentiality. Any questions you may have will be answered and explained any time before, during and after the data collection.

Do you agree to be a part of this study?

Yes _____

No _____

CONSENT FORM

I have read understand the Participant Information Sheet. I have been given sufficient time to consider whether or not to participate in this study. I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without this explanation. I know who to contact if I have any questions about the study in general. I understand that my participation in this study is confidential.

Declaration by participant:

I hereby consent to take part in this study.

Signature:

Date:

Declaration by member of research team:

I have given a verbal explanation of the research project to the participant, and have answered the participant's questions about it.

I believe that the participant understands the study and has given informed consent to participate.

Researcher's name:

Signature:

Date:

Supervisor's name _____

Signature _____

Date _____

የምርምር/ጥናት/ ማህበራዊ ቅጽ

ተመራማሪ - ሰናይት ሰዓድ

ስልክ ቁ. 0911170066

ወድ ተሳታፊዎች

ይህ የተሳታፊ መረጃ ቅጽ የመተባበሪያ ፍላጎታችሁን ይጠይቃል፡፡ ይህንንም ጥናት ለማካካት የእርስዎ ቅንነት የተሞላበት ተሳትፎ ወሳኝነት አለው፡፡ የዚህ የምርምር ማህበራዊና የስምምነት ቅጽ ዓላማ አሁን እርስዎ አንዲሳተፉበት የምንጠይቀውን የምርምር ጥናት ምንነት ማህበራዊ ነው፡፡ በዚህ የምርምር ጥናት ለመተባበሪያ ከመወሰን በፊት ይህንን የማህበራዊ ቅጽ በጥንቃቄ በማንበብ ጥያቄዎች ካሉዎት ይጠይቁ፡፡ በተጨማሪም በጥናቱ መተባበሪያ ከጀመሩ በኋላ በማንኛውም ጊዜ ጥያቄዎች ካሉዎት መጠየቅ ይችላሉ፡፡

ይህ ጥናት በአዲስ አበባ መንግስት ተ/ቤት ወጣቶች ላይ የጭቀት መጠንና የቤተሰብ ቸልተኝነት ከጭቀት ጋር ያለውን ተያያዥነት ላይ የሚተኮር ነው፡፡ በዚህ ጥናት ውስጥ ለመተባበሪያ ከተሰማሙ ስምምነቱን በደንብ መረዳትና እንዲሁም መረጃዎን ይገባዎታል፡፡ ይህ ጥናት ሶስት መሳሪያዎችን ሲያካትት ጥያቄዎቹን ለመመለስ ከ20-30 ደቂቃዎች ይፈጃል፡፡ ከዚያ በመቀጠል በጥናቱ መረጃ ሰብሳቢዎች ለመጠየቅ ጥያቄ መልስ እንዲመልሱ ፈቃደኝነትዎን እንጠይቃለን፡፡ በዚህ ጥናት ሲሳተፉ የሚሰጡት መልስም ሆነ የሚገኘው ውጤት በምስጢር ይጠበቃል፡፡ ከዚህ ጥናት የሚገኝ መረጃ በሙሉ በምስጢር ይጠበቃል፡፡ ለዚህ ጥናት የሚሰጡበት እርስዎን የሚመለከት መረጃ በሚደረግ የመቆሙ ሲሆን ማህበራዊ በስመዎ ሳይሆን በተለየ ኮድ ሲቀመጥ ኮዱ ከዋናው ተመራማሪ ወይም ለማንም አይገለጽም፡፡ በጥናቱ ላለመተባበሪያ ከፈለጉ በዚህ ጥናት ያለመተባበሪያ ወይም ከአንድ በላይ ወይም ሁሉንም ጥያቄዎች አለመመለስ ይችላሉ፡፡ በዚህ ጥናት ባለመተባበሪያ ወይም በከፊልም ሆነ በሙሉ ጥያቄዎችን አለመመለስ ምንም አይነት ችግር የለውም፡፡

በዚህ ጥናት ለመተባበሪያ ፈቃደኛ ነዎት

አዎ _____

አይ _____

የስምምነት መግለጫ ቅጽ

ከላይ የተጻፈውን የማህበራዊ ቅጽ አንብቤ ተረድቻለሁ፡፡ እዚህ ጥናት ላይ የመተባበሪያ ሆኖ ያለ መተባበሪያ ሙሉ መስጠት እንዳለኝ ተረድቼ እና በማንኛውም ሰዓት የማይቀረጥ መስጠት እንዳለኝ አቃለሁ፡፡ ጥያቄዎች ካሉኝ ማንን መጠየቅ እንዳለብኝ እና እዚህ ጥናት ውስጥ መተባበሪያ በሙሉ ሚጠየር እንደሚጠበቅ አወቃለሁ፡፡

የተሳታፊ ፈቃድ

- በፊርማዎ ፈቃደኛነቴን አረጋግጣለሁ

ፊርማ _____

ቀን _____

የጥናቱ ክፍሉ አባል ፈቃድ

- ስለ ጥናቱ ዓላማ አስረድቼ እና ተሳታፊዎቼ ያላቸውን ጥያቄዎች መልሼ ተሳታፊው ስለዚህ ጥናት መላኩ በመላኩ መረዳቱን አምና ፈቃዱን ሰጠልኝ፡፡

የጥናቱ ተመራማሪ _____

ፊርማ _____

ቀን _____

የተቆጣጣሪ ፊርማ _____

ቀን _____

ANNEX II- QUESTIONNAIRES

I. SOCIO DEMOGRAPHIC QUESTIONS

No.	Questions	Answer
1.	Age in complete years	_____
2.	Sex	Male <input type="checkbox"/> Female <input type="checkbox"/>
3.	Educational Status	11 th grade <input type="checkbox"/> 12 th grade <input type="checkbox"/>
4.	Religion	Orthodox <input type="checkbox"/> Muslim <input type="checkbox"/> Protestant <input type="checkbox"/> Other <input type="checkbox"/>
5.	Father's Occupation	Farmer <input type="checkbox"/> Daily Laborer <input type="checkbox"/> Merchant <input type="checkbox"/> Governmental Employee <input type="checkbox"/> Private Employee <input type="checkbox"/>
6.	Mother's Occupation	Farmer <input type="checkbox"/> Daily Laborer <input type="checkbox"/> Merchant <input type="checkbox"/> Governmental Employee <input type="checkbox"/> Private Employee <input type="checkbox"/> Housewife <input type="checkbox"/>
7.	Father's Education Status	Illiterate <input type="checkbox"/> 1-4 th grade <input type="checkbox"/> 5-8 th grade <input type="checkbox"/> 9-12 th grade <input type="checkbox"/> Certificate & Above <input type="checkbox"/>
8.	Mother's Education Status	Illiterate <input type="checkbox"/> 1-4 th grade <input type="checkbox"/> 5-8 th grade <input type="checkbox"/> 9-12 th grade <input type="checkbox"/> Certificate & Above <input type="checkbox"/>

II. PHQ 9		
9.	Little interest or pleasure in doing things.	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/> More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
10.	Feeling down, depressed, or hopeless.	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/> More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
11.	Trouble falling/staying asleep, sleeping too much.	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/> More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
12.	Feeling tired or having little energy.	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/> More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
13.	Poor appetite or overeating.	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/> More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
14.	Feeling bad about yourself or that you are a failure, or have let yourself or your family down.	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/> More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
15.	Trouble concentrating on things, such as reading the newspaper or watching TV.	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/> More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
16.	Moving or speaking so slowly that other people could have noticed. Or the	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/>

	opposite; being so fidgety or restless that you have been moving around more than usual.	More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
17.	Thoughts that you would be better off dead or of hurting yourself in some way	Not at all (0) <input type="checkbox"/> Several Days (1) <input type="checkbox"/> More than half the days (2) <input type="checkbox"/> Nearly every day (3) <input type="checkbox"/>
III. ACE		
18.	Did a parent or other adult in the household often ... Swear at you, insult you, put you down, or humiliate you? Or Act in a way that made you afraid that you might be physically hurt?	Yes If yes enter 1 _____ No
19.	Did a parent or other adult in the household often ... Push, grab, slap, or throw something at you? Or Ever hit you so hard that you had marks or were injured?	Yes If yes enter 1 _____ No
20.	Did an adult or person at least 5 years older than you ever ... Touch or fondle you or have you touch their body in a sexual way? Or Try to or actually have oral, anal, or vaginal sex with you?	Yes If yes enter 1 _____ No
21.	Did you often feel that ... No one in your family loved you or thought you were important or special? Or	Yes If yes enter 1 _____ No

	Your family didn't look out for each other, feel close to each other, or support each other?		
22.	Did you often feel that ... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? Or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?	Yes No	If yes enter 1 _____
23.	Were your parents ever separated or divorced?	Yes No	If yes enter 1 _____
24.	Was your mother or stepmother: Often pushed, grabbed, slapped, or had something thrown at her? Or Sometimes or often kicked, bitten, hit with a fist, or hit with something hard? Or Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?	Yes No	If yes enter 1 _____
25.	Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?	Yes No	If yes enter 1 _____
26.	Was a household member depressed or mentally ill or did a household member attempt suicide?	Yes No	If yes enter 1 _____
27.	Did a household member go to prison?	Yes No	If yes enter 1 _____

I.		
ተ.ቁ	ጥያቄ	መልስ
1.	ዕድሜ	_____
2.	ጾታ	ወንድ <input type="checkbox"/> ሴት <input type="checkbox"/>
3.	የትምህርት ክፍል	11ኛ ክፍል <input type="checkbox"/> 12ኛ ክፍል <input type="checkbox"/>
4.	ሀይማኖት	ኦርቶዶክስ <input type="checkbox"/> ሙስሊም <input type="checkbox"/> ፕሮቴስታንት <input type="checkbox"/> ሌላ <input type="checkbox"/>
5.	የአባት የስራ መደብ	ገበሬ <input type="checkbox"/> የቀን ሰራተኛ <input type="checkbox"/> ነጋዴ <input type="checkbox"/> የመንግስት ሰራተኛ <input type="checkbox"/> የግል ሰራተኛ <input type="checkbox"/> የቤት እመቤት <input type="checkbox"/>
6.	የእናት የስራ መደብ	ገበሬ <input type="checkbox"/> የቀን ሰራተኛ <input type="checkbox"/> ነጋዴ <input type="checkbox"/> የመንግስት ሰራተኛ <input type="checkbox"/> የግል ሰራተኛ <input type="checkbox"/>
7.	የአባት የትምህርት ደረጃ	ያልተመረ <input type="checkbox"/> 1-4ኛ ክፍል <input type="checkbox"/> 5-8ኛ ክፍል <input type="checkbox"/> 9-12ኛ ክፍል <input type="checkbox"/> ሰርተፊኬት እና ከዛ በላይ <input type="checkbox"/>
8.	የእናት የትምህርት ደረጃ	ያልተመረ <input type="checkbox"/> 1-4ኛ ክፍል <input type="checkbox"/> 5-8ኛ ክፍል <input type="checkbox"/> 9-12ኛ ክፍል <input type="checkbox"/>

		ሰርተፊኬት እና ከዛ በላይ <input type="checkbox"/>
II. ጊኤቸኪው 9		
9.	ነገሮችን ለመስራት ትንሽ ፍላጎት ወይም ደስታ	ፈጽሞ ለየለኝም (0) <input type="checkbox"/> በርካታ ቀኖች (1) <input type="checkbox"/> ከግማሽ ቀኖች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
10.	ዝቅትኝነት፣ ጭቀት ወይም ተስፋ የለሽነት ስሜት	ፈጽሞ ለየለኝም (0) <input type="checkbox"/> በርካታ ቀኖች (1) <input type="checkbox"/> ከግማሽ ቀኖች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
11.	እንቅልፍ የመተኛት ችግር/ብዙ የመተኛት ሁኔታ	ፈጽሞ ለየለኝም (0) <input type="checkbox"/> በርካታ ቀኖች (1) <input type="checkbox"/> ከግማሽ ቀኖች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
12.	የድካም ስሜት ወይም ትንሽ ሀይል መኖር ሁኔታ	ፈጽሞ ለየለኝም (0) <input type="checkbox"/> በርካታ ቀኖች (1) <input type="checkbox"/> ከግማሽ ቀኖች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
13.	ደካማ የምግብ ፍላጎት ወይም ብዙ መጣብ	ፈጽሞ ለየለኝም (0) <input type="checkbox"/> በርካታ ቀኖች (1) <input type="checkbox"/> ከግማሽ ቀኖች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
14.	ስለራስ መገደ ስሜት ወይም የወደቀት ስሜት መሰማት ወይም እራስን ወይም ቤተሰብዎን ዝቅ የማድረግ ስሜት	ፈጽሞ ለየለኝም (0) <input type="checkbox"/> በርካታ ቀኖች (1) <input type="checkbox"/> ከግማሽ ቀኖች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
15.	ጋዜጣ ማንበብ ላይ ወይም ቴሌቪዥን ማየት ላይ የአትኩሮት ችግር	ፈጽሞ ለየለኝም (0) <input type="checkbox"/> በርካታ ቀኖች (1) <input type="checkbox"/> ከግማሽ ቀኖች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
16.	ሌሎች ሰዎች እስኪታወቃቸው ድረስ ከወትሮው	ፈጽሞ ለየለኝም (0) <input type="checkbox"/>

	የተለየ የመንቀሳቀስ ወይም የመናገር ዝግመት ወይም በተቃራኒው ከተለመደው ወጪ የበለጠ እንቅስቃሴ እና እረፍት አጥ መሆን	በርካታ ቀናች (1) <input type="checkbox"/> ከግማሽ ቀናች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
17.	ብዛት ይሻላል ብለው አስበው ወይም በሆነ መንገድ እራስን የሙዳት ሀሳብ	ፈጽሞ ለየለኝም (0) <input type="checkbox"/> በርካታ ቀናች (1) <input type="checkbox"/> ከግማሽ ቀናች በላይ (2) <input type="checkbox"/> በየቀኑ (3) <input type="checkbox"/>
III. ኤሲኢ		
18.	ወላጅ ወይም ሌላ ቤትዎ ያለ አዋቂ በአብዛኛው እርስዎን ተቆትቶ፤ ተሳደቦ፤ ዝቅ አድርጎ ወይም አዋርዶታል ወይም በአካል ልትጎዱ እንደሚችሉ እንዲፈሩ አድርገዋል	አዎ አዎ ከሆነ 1 ይጻፉ _____ አይ
19.	ወላጅ ወይም ሌላ ቤትዎ ያለ አዋቂ ገፍትሮት፤ ይዘት፤ በጥሬ መቶት ወይም የሆነ ነገር ወርወሮታል ወይም የጉዳት ምልክት እስኪኖረው ወይም እስኪጎዱ በጣም መቶታል	አዎ አዎ ከሆነ 1 ይጻፉ _____ አይ
20.	አዋቂ ወይም ከእርስዎ በ5 ዐመት ታላቅ የሆነ ሰው ጾታዊ በጎነ መንገድ ነከቶት ያወቃል ወይም ከእርስዎ ጋር ጾታዊ ግንኙነት ለማድረግ ሞክሯል ወይም አድርጓል	አዎ አዎ ከሆነ 1 ይጻፉ _____ አይ
21.	በአብዛኛው ከቤተሰብዎ ማንም እንደሚወድዎት ወይም ልዩ እንዳልሆኑ ተሰምዎት ያወቃል ወይም ቤተሰብዎ እርስ በእርስ አይተጋገዝም አይቀራረብም፤ ወይም አይደጋገፍም	አዎ አዎ ከሆነ 1 ይጻፉ _____ አይ
22.	በቂ ምግብ እንደማይገኙ፤ የቆሸሸ ልብስ እንደለበሱ፤ የሚጠበቅዎት እንደሌለ በአብዛኛው ተሰምዎት ያወቃል ወይም ወላጆችዎ በጣም ስክረው እረስዎን ለምንከባከብ ወይም ህክምና እንዳያገኙ ማድረግ ሳይችሉ እንደቀሩ ተሰምተዎት ያቃል	አዎ አዎ ከሆነ 1 ይጻፉ _____ አይ
23.	ወላጆችዎ ተነጣጥለው ወይም ተፋተው ያወቃሉ	አዎ አዎ ከሆነ 1 ይጻፉ _____ አይ

24.	<p>በአብዛኛው ጊዜ የእርስዎ እናት ወይም እንጅራ እናት ገፍትራዎት፤ ይዛዎት፤ መታዎት ወይም የሆነ ነገር ወርወራበት ታወቃለች ወይም አንዳንዴ ወይም ብዙ ጊዜ በእጅ መታዎት ወይም የሆነ ነገር በጣም መታዎት ታወቃለች ወይም ለጥቂት ደቂቃዎች በተደጋጋሚ መታዎት ወይም በሽጉጥ ወይም በሴንጢ አስፈራርተዎት ታወቃለች</p>	<p>አዎ አዎ ከሆነ 1 ይጻፉ _____</p> <p>አይ</p>
25.	<p>ሰካራም/አልኮል ተጠቃሚ ወይም የመንገድ ላይ እጽ ተጠቃሚ ከሆነ ሰው ጋር አብረው እየኖሩ ነው</p>	<p>አዎ አዎ ከሆነ 1 ይጻፉ _____</p> <p>አይ</p>
26.	<p>ከቤተሰብ አባልዎ የተጨቀ ወይም የአእምሮ በሽተኛ ወይም እራስን ለማጥፋት የሞከረ አለ</p>	<p>አዎ አዎ ከሆነ 1 ይጻፉ _____</p> <p>አይ</p>
27.	<p>ከቤተሰብ አባልዎ እስር ቤት የገባ አለ</p>	<p>አዎ አዎ ከሆነ 1 ይጻፉ _____</p> <p>አይ</p>